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A PARTIAL REVIEW OF TWO THOUSAND CASES OF MID-WIFERY.1

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The two thousand cases of midwifery which have occurred in my own practice commenced with the year 1839, and close with the present time. For the first twenty years I have no special notes or statistics except the numbers annually attended, and occasional notes of difficult and abnormal labor. I regret that I cannot present more exact data, it would so greatly enhance the value of this paper, and the only apology I have to offer is the fatigue and hurry incident to a busy professional life. From my imperfect data a table has been prepared of obstetrical cases since 1859, or the last twenty years. Previously the annual number was greater:—

| Tot | al nu | mbe | erof | cases f | rom | 1839 | to 1879 | 2000 | |
|-----------|-------|------|-------|---------|-----|-------|------------|---|---|
| Tot | al nu | | | | rom | 1859 | to 1879 | 900 | |
| | | - | | 1859. | | | | COMPLICATIONS. | |
| Total nu | ımbe | r of | pola | noted | | | 187 | Adherent placenta | 2 |
| Total nu | ımbe | r of | girls | noted | | | 159 | Hour-glass contraction | 1 |
| | | | | | | | | Puerperal convulsions | 4 |
| | | | | | | | 346 | Puerperal mania | 3 |
| Still-bor | n | | | | | | 42 | Puerperal peritonitis | 3 |
| Twins | | | | | | | 3 | Hæmorrhage, general | 2 |
| Triplets | | | | | | | 1 | Hæmorrhage, ante-partum | 2 |
| Acephal | ous | nfar | nt . | | | | 1 | Hæmorrhage, post-partum | 2 |
| Intra-ut | | | | ion | | | 1 | Some and the control of the control | |
| | | | | | | | | OF THE CHILD. | |
| | | PRI | SENT | ATION | 8. | | | Cyanosis | 2 |
| Face | | | | | | | 3 | Purpura hæmorrhagica | 2 |
| Face an | d rig | ht a | rm | | | | 1 | Spina bifida | 1 |
| Shoulde | | | | | | | 1 | Imperforate ani | 3 |
| Arm | 1 | 1 | 1 | Print. | | | 2 | Double hare-lip, with cleft palate . | 2 |
| Breech | 1 | | Tip: | 1 31 14 | 1 | 13929 | 5 | the tribular semicolar management should reach the | |
| Foot | | | | 1 | | 1 | 3 | ABNORMALITY. | |
| Placent | nra | via | | - | | | 1 | Umbilical cord 45 inches | 1 |
| Cord | . p | | | THE Y | 100 | W. | 9 | Umbilical cord 36 inches | 1 |
| Coru | • | | - | 700 | 3 | di. | 100078 | Umbilical cord eight inches | 9 |
| | | **** | | ENTA | | | | Hypertrophy of cord, excessive | 1 |
| D | | INE | TRUI | ENTA | | | 35 | Primipara forty-five years old | - |
| Forceps | | 120 | 1 | | | | 0 1970 (25 | | 0 |
| Craniot | omy | | | | | | 2 | Seventeen years from last confinement | • |
| | | | | | | | | Many umbilical cords with single and | |
| | | | | | | | | double knots. | |

¹ Read before the Suffolk District Medical Society, March and April, 1879.

The sex of less than half the births is given; the cases of still-birth, abnormal presentations, and instrumental delivery are accurately noted; also diseases and accidents incident to the labors. Forty-one per cent. of the girls were born before the day of engagement, while only thirty-one per cent. of boys were born before the expected time? The average duration of labor in a large number of cases noted in hand-book was ten hours. The duration of labor in cases of foreigners was about the same as of Americans.

In the early part of my practice the prevailing fashion and desire among married women were to bear children and rear families. They possessed the courage, and were willing to suffer for such a boon. To be barren was considered among the Jews a curse of the Almighty, and many of our grandmothers cherished sentiments akin to this. Tempora mutantur, and what physician at the present day has not had occasion to hang his head for shame, and feel the strength of his moral indignation, at witnessing the apathy or positive dislike - to use no stronger term - with which the first faint cry of the new-born infant is received, I cannot say welcomed, by the friends, and perhaps the suffering mother! Such spectacles are far from agreeable to the faithful and weary physician, who has spent hours of patient and anxious waiting at the bedside of the sufferer. Fortunately, such cases are infrequent; true maternity is the rule. I have never known an Irish mother, no matter how poor, or how many little ragged children around her, that did not receive every new-born babe with emotions and expressions of gratitude, as a blessed gift from God. This sentiment, however rudely expressed, has never failed to win my admiration, and I take pleasure in pointing it out as the finest trait of Irish female character. Women, formerly, both in city and country, had a more vigorous physique, and were better qualified to bear the trials of the pregnant state and the pains of labor, than at the present day. Our civilization, with all its enervating influences, lies at the bottom of this deterioration. These varied causes have changed, to a considerable extent, the type of labor. Formerly an anæmic patient was an anomaly, and nervous exhaustion a condition almost unknown. These two classes are now the most frequent and dangerous we are called to encounter. A few words on the old methods of conducting labors. The length of a natural labor was limited to twenty-four hours; beyond this period it was considered tedious. Perhaps patience was more thoroughly exercised then than now. If ergot was occasionally given, delivery by forceps was extremely rare. Parturition was believed to be a purely natural process, not to be interfered with or hastened, except from the most urgent necessity. By this system of non-intervention delay was often occasioned, fatal to the infant, and perhaps injurious to the mother.

At a period earlier than my record, say fifty years ago or more, it

was a common practice to allow the free use of ardent spirits in labor, increasing the doses as the pains grew stronger, so that at the point of delivery the patient became free from all care and oblivious of suffering. In my early practice I remember some practitioners who favored this treatment. This antedated the origin of teetotal and temperance societies.

In 1846 chloroform was used as an anæsthetic in labor, and the recommendation of Dr. Simpson was received as a guaranty of its safety. I employed it frequently, fifteen to thirty drops on a napkin, renewed occasionally. It was pleasant to the patient, and prompt in its relief. The accidents sometimes reported from the use of chloroform very soon led physicians to distrust its safety. Ether, of which the anæsthetic properties had already been discovered in Boston, and which had been successfully employed in surgical operations at the Massachusetts General Hospital, immediately took rank in midwifery as a safe and convenient anæsthetic. The medical profession, as well as the community, are justly proud of the great discovery, though puzzled in deciding to whom the honor belonged. Dr. J. C. Warren, one of the earliest and most distinguished surgeons of the Massachusetts Hospital, was represented as saying "that Jackson was the head, and Morton the hand,"—a verdict generally adopted by the profession as fair and just.

In primiparæ I frequently administer ether in the early stage, if there is rigidity of the os uteri; otherwise not till the second stage is well advanced, and generally not till the expulsive pains. If the ether bottle be placed on the mantel, in sight of the patient, its effect is sufficient. It is a misfortune to etherize primiparæ early, as nervous and hysterical symptoms may be developed, greatly retarding the progress of labor. Dr. Channing, on the introduction of ether, employed it in all cases of

labor, and records his success in his work on that subject.

The position of the patient in the second and third stages of labor I deem important. In the early stage she is allowed to walk about and amuse herself, submitting to an occasional examination. As dilatation advances, she takes to the bed, lying near its edge and on her left side. On the recurrence of pain the feet may be pressed, for support, against the foot-board or bed-post, and a sheet or towel attached to the same may be held by the patient's hands. The left-side position is the English and American custom; on the back is preferred by the French and Germans. When the woman is corpulent, with prominent or pendulous abdomen, I usually put her on the back. A rapid change in the character and frequency of the pains often follows, hastening delivery.

Nearly every form of dystocia recorded by authors has come under my care first or last, and I propose to mention some of them.

Powerless or lingering labor is one of the common forms. It may arise from contracted pelvic diameters, an anaemic or enfeebled cond-

tion, or a state of mental depression. Other examples arise from unknown causes in robust and apparently vigorous women. Peculiarities of labor also appear to be transmissible. "Like mother like daughter," is a proverb. When patience is exhausted, hot drinks and gin-sling are given; a drachm of fluid extract of ergot is often effective. I formerly used the freshly powdered ergot, and in a few instances had occasion to regret its violent action. Since the introduction of the fluid extract of ergot, I have always employed it, when indicated, with much benefit and no untoward results. Sometimes the forceps have been resorted to for the completion of a lingering labor.

Rigidity of the os uteri may always be apprehended in primiparæ advanced in years. Patience with careful manipulation often accomplishes dilatation. In the more obstinate cases a simple enema, securing an alvine discharge, may prove sufficient; or, still better, one or two grains of opium, or a hypodermic injection of morphia, may be resorted to, and is followed by sleep and speedy relaxation. If these remedies fail, an injection, per anum, of three to five grains tart. antimon. in a gill of tepid water secures a copious mucous secretion and rapid dilatation. One or all of these measures generally produce the desired result.

Nervous labors, in women of hysterical temperament, are usually vexatious and tedious; occasionally this class of patients pass through the ordeal bravely, and give but little trouble. They are inclined to false alarms, a source of much annoyance. The labor is marked by irregular contractions, and its progress is usually capricious. Leaving the sick-room for a little while and returning unexpectedly I have often found a successful dodge, causing a rapid change for the better. With such women the inhalation of ether has a much better effect than opium.

The catheter should be passed when needful. The parturient efforts are sometimes dominated by mental states or emotions. Illegitimate births are often difficult; the poor sufferer has few prospects to cheer, and little courage to sustain her.

Suspended Labor. — This term applies to cases where dilatation of the os uteri to the size of a quarter dollar, or greater, has existed for days, or perhaps weeks, without any marked progress. There is some uneasiness and slight pains, but the patient remains in statu quo. At length active contractions come on, and confinement is completed. One well-marked case is mentioned in my table, in which the os was dilated to the size of a silver dollar for two weeks before delivery, which resulted safely for mother and child. Other cases are recalled where the dilatation was less and the intervening time shorter.

Presentations. — It is all-important to learn the presentation at the earliest possible moment. This may frequently be done before the rupture of the membranes. In head presentations, by far the most frequent form, in my experience, is that of the anterior portion of the

cranium to the left sacro-iliac synchrondrosis, occasionally to the right, sometimes to the left foramen ovale, and again to the right. Four cases of forehead to the pubes are noted in the table.

All these varieties rectify their positions as the head descends, except the last. With forehead to the pubes, there is want of adaptation to the pelvic diameters. The delivery is always tedious, though safe.

In head presentations with contracted pelvic diameters, or, what amounts practically to the same thing, a very large head, I have experienced much difficulty. Forceps have usually proved effectual. In one case mentioned in the table and another at an earlier period, craniotomy was resorted to.

Face presentations are fortunately rare, and difficult to conduct. Four cases are noted in the table, one of which required no special aid, as both the head and infant were small. The remaining three were delivered by forceps, one of which I will relate: On examination per vaginam the face was found well down, and the head very large. The physician first called had suddenly deserted the patient, and left her in care of the nurse. The forceps were immediately applied, but continued traction made no impression. I went home for my Baudelocque's long forceps. The blades were fitted, and I pulled with all my might, with frequent intervals of rest, for two long hours. At length a slight advance was realized, and soon delivery was accomplished. The child was still-born, and weighed twelve pounds. I remember to have employed in this case a contrivance suggested to me by the late J. W. Warren, of Harrison Avenue, namely a towel tied securely about the accoucheur's waist, to which a stout double cord is attached in front and made fast to the handles of the forceps. On the recurrence of pain, I would brace my feet and make forcible traction by leaning backwards. This gave rest to the weary hands and arms, and supplied the place of an assistant. The mother had ruptured perinæum and sphincter ani, both of which were carefully stitched, and the knees bound together. For months after she had little or no control of the alvine discharges. Afterwards she was sent to the Massachusetts General Hospital for a surgical operation, but left without relief, as she was too timid to submit to it. The rent, however, gradually cicatrized firmly, and the function of the rectum was fully restored. In subsequent labors not the slightest difficulty was experienced from the old injury.

Shoulder and arm presentations require similar treatment, and turning is the only available remedy. If the hand and arm early protrude through the partially dilated os uteri, the diagnosis is apparent. If the shoulder present, the diagnosis is difficult, if not impossible, until the parts are fully dilated. When labor is far enough advanced the hand and fore-arm of the accoucheur is introduced, and after much blind searching a foot is grasped, the direction of the heel being ascertained.

and is brought downward and forward. The second foot always follows the first, and delivery is effected as a footling case. Delivery of the head is the only remaining difficulty. Traction by a finger in the child's mouth, with conjoined pressure over the uterus, has usually proved sufficient; if not, a single blade of the forceps, introduced and employed as a vectis, has never failed me. When turning has been employed, after the evacuation of the waters, a condition in all my cases, the contractions are strong, and impede, if not prevent, all progress. I have kept the patient under ether, and diminished the difficulty. Before the discovery of anæsthetics the relaxation was partially attained by full venesection and the exhibition of tartarized antimony.

Denman observed that the arm and shoulder sometimes receded, and breech descended into the pelvis by what he called "spontaneous evolution of the fœtus." This theory was more fully explained by Dr. Douglass, of Dublin, and afterwards confirmed by Dr. Gooch. I have never witnessed this happy change. This presentation, it is claimed, is sometimes changed by the process of conjoined bimanual manipulation.

I have made attempts, but never succeeded in the efforts.

Breech presentations are next to those of the head in safety; there is usually delay in the passage of the hips, but the chief trouble is in the safe delivery of the head. The waters often break early when the breech is high up, and then the diagnosis is difficult; the pelvic bones of the fœtus and also the nates may be distinguished, but the stain of meconium on the attendant's finger is the surest sign. The birth of the hips is usually slow, but may be aided by gentle traction of the body. The fœtal arms can be withdrawn by pushing up the finger over the shoulder and making traction. When all but the head has passed, at the first possible moment I put the forefinger into the child's mouth, allow the air to enter by depressing the jaw, and at the same time employ moderate tractive force. If the child gulp or cry in this position I feel sure of its life. If the head be large and the pains unreliable, as they generally are at this stage, there is imminent danger to the child from suspension. This I have always found to be the great risk of breech presentation. Immediately I pass up the vectis or a single blade of the forceps, and move slightly the position of the head, and make forcible traction, and never failed of prompt success, and without serious contusion of the soft parts of the mother. A compound . presentation of the right hand and arm with the face is noted in the table. This was a difficult case to manage, and required the use of forceps after trying efforts in vain to restore the prolapsed member. Other cases come to mind where a hand presented with the head and was successfully restored, and instantly the head entirely filled the passage and presented no further difficulty. Great caution is requisite in the restoration of the protruding parts, lest the head recede, and a presentation of the upper extremity result.

In two cases recorded the elbow of the child, in natural labor, was firmly braced against the pubes of the mother. This prevented the descent of the head; indeed, progress was at a stand-still, though the pains were vigorous, and no reason could be assigned for the delay. There was evidently an obstacle, but I could not detect it till after the passage of the head, when the elbow was found to have been firmly braced, forming a solid prop. This is a complication I do not remember to have seen noticed by any author.

Prolapse of the cord is a complication of repeated occurrence in my practice, though two cases only are recorded in the table. Such cases have proved unfortunate in results. When the cord falls at an early stage of the labor, I have resorted to taxis for its reposition, and the patient is placed in the elbow-and-knee position. While this posture is maintained all is well, but soon it becomes irksome and fatiguing, so that few women can be urged to continued it till the head descends sufficiently to close the pelvic cavity, and so prevent further prolapse. A variety of contrivances have been resorted to for the purpose of supporting the cord in situ, for example, double flexible catheters with tapes. The cord is always long in such instances. In a few cases I have succeeded in saving the child, but more frequently it has been still-born.

Placenta Prævia. - I had never seen a case of this complication till called to Mrs. W. G. T., a primipara, twenty-five years old, and formerly a surgical nurse in the Massachusetts General Hospital, July 19, 1874. I had visited her for a week before confinement, and prescribed for a moderate uterine hæmorrhage fluid extract of ergot, acidulated drinks, and rest. Afterwards, on examination, the os uteri was found patulous simply, and the bleeding continued for a week. Placenta prævia was apprehended. On the morning of July 29th I was called at four o'clock, and found the patient with moderate pains and bleeding more freely. The os was dilated to the size of a quarter dollar, but the finger could penetrate but slightly; a spongy mass obstructed the passage. No edge could be felt, and little room for exploration. After a few hours the os was distended to the size of a silver dollar. By persistent pressure the finger was pushed through the placental mass and the opening gradually enlarged, and the substance, as far as possible, separated from the uterine walls. At length the placental edge could be plainly felt, and when the rent was sufficiently long the torn edges were turned back. At every pain the bag of waters was prominent, and protruded through the artificial opening. Fortunately, as the labor advanced the pains became vigorous and regular, and the hæmorrhage diminished. At three P. M. the membranes were ruptured, and a large quantity of fluid was evacuated. As progress was slow and the patient somewhat exhausted, - though freely supported by food

and stimulants, — at four o'clock I applied the forceps. The head presented, and the delivery of a still-born child was soon accomplished. The placenta soon followed, and on inspection was found to be of good size, the cord attached on one side the centre, and the rent was four inches long from near the centre and outwards through the edge. Slight hæmorrhage followed delivery, but otherwise no serious symptoms, and the woman made a good recovery.

Adherent Placenta. - Two instances of this complication are noted in the table, and both in the same mother: the first occurred in 1867. and the last in 1874. In the first the presentation was natural and delivery favorable. On making abdominal pressure and waiting a little the placenta did not come; on pulling the cord gently it appeared to be attached to something solid. By passing up the hand, the placenta could be touched, but not grasped. At the edge it was adherent, and it was difficult to insinuate the finger nail between it and the uterine wall. After much picking it was slightly started. Constant peeling made slow progress, with much pain to the mother and slight hæmorrhage. By continuing these efforts more than two hours, the entire placenta was at last detached and removed. The suffering and loss of blood quite overpowered the patient. On inspection the placental mass presented a degenerated condition, studded throughout with calcareous deposits. Uterine inflammation supervened, which yielded to medication in two weeks, and mother and child did well.

In 1874 the same lady was again confined, and experienced a similar difficulty, but the placenta was not so thoroughly adherent as before, and no serious results followed.

Hour-Glass Contraction. — A single instance of this rare complication is noted in the table, though another case, many years ago, is well remembered. There are some forms of irregular contraction of the uterus that are difficult to distinguish from the true hour-glass; yet after a physician has once managed a true case he will never afterwards be left in doubt. The circular fibres of the uterus are so perfectly contracted below the placental mass, usually confined at the fundus, that the two halves of the uterine cavity are completely divided, with a connecting passage sufficient only for the umbilical cord. All approach to the placenta at first seems impossible. The point of the finger is at length insinuated into the stricture, afterward a second finger, and finally the whole hand is pushed through, and, grasping the placenta with much difficulty, draws it away.

In one instance I employed ether in aid of the operation; in the other, simple dilatation was sufficient. The process is a tedious and painful one, and requires patience.

The irregular contractions are much more frequent, and are apt to follow the use of ergot. The occlusion is only partial, and may readily be overcome by effort or the aid of ether.

Instrumental Delivery. - In my early practice the forceps were rarely employed in delivery; within the last thirty years the frequency of their use has more than quadrupled. The idea of horror and fatality was associated in the minds of women with the name of instruments. This is altogether different from what exists at present. The old-fashioned natural labors were longer in duration and more tedious than at the present day. In shortening this protracted suffering by artificial help, obstetric authorities of the present time show their superiority to the wisdom of the fathers. For many years of my early practice I was not the owner of a set of obstetrical instruments, and had little occasion to call in the aid of others to employ them. I doubt not it would have been better in some cases for mother or child had I used them. I gradually grew into their favor in city practice, occasionally meeting cases of difficulty; and I look back to the adoption of their use with great satisfaction. It is difficult to lay down definite rules for the use of the forceps. The recent teachings of Mr. Barnes, the distinguished English obstetrician, are as near perfect as any that have ever been published. The judgment of the medical attendant, founded on his varied experiences, must be his guide in individual cases, not only in selecting the proper subject, but the fortunate moment for in-The safety of the mother is the first consideration, that of the infant is second. These indications are frequently antagonistic, but are sometimes coincident.

When convulsions threaten, or actually occur, the rule is to deliver as rapidly as possible, and this prompt remedy may fail to stop them. In cases of ante-partum hæmorrhage the patient getting exhausted, or where the pains are inefficient and both mother and child are imperiled by delay, instrumental aid becomes a necessity. Again, the pelvic diameters are narrow, and the uterine efforts are insufficient to expel the head; in a few moments moderate traction by forceps overcomes the difficulty. In all such examples, and many others which might be cited, patients and resources alike are exhausted; we then turn gladly to the forceps for relief. As to the precise time when instrumental aid should be resorted to, the judgment of every practitioner must be the guide. In natural labor, the soft parts well dilated and the head fairly down, continued pains have produced no sensible progress for four consecutive hours, and perhaps a falling off in strength and courage of the patient; then I gently but forcibly hint the propriety of using forceps.

A word in regard to the proper position for the operation. My custom is to place the woman on the left side, near the edge of the bed. By passing up one or two fingers of the left hand under the side of the child's head, and pushing the perinæum well back, the male blade of the forceps is gently though firmly pushed downwards along the inside of the fingers till the head is passed. The handle is then held firmly by the

assistant or nurse. The female blade is then passed upward and anterior to the first. To avoid embarrassment in passing the second blade, the patient's hips should well overhang the edge of the bed; otherwise there cannot be free play for the handles. When in position the two handles may be brought together, using caution not to pinch the soft parts, then to be securely locked, and nothing now remains but to apply the extractive force.

The lithotomy position, or that on the back, derived from the custom the French and Germans, is much in vogue at present. I do not condemn it, but the side position has always done well with me, and I like it. By unlocking the forceps at the point when the head distends the perinæum and is about to emerge, and withdrawing the blades singly and gently, perineal rupture may be avoided. But if, unfortunately, rupture should occur, a few sutures or the application of two or three serres-fines and binding the woman's knees together will soon repair the damage.

(To be concluded.)

PUERPERAL CONVULSIONS.1

BY HOWLAND HOLMES, M. D.

Searching for the cause of eclampsia gravidarum et parturientium, in 1841 Professor Simpson, of Edinburgh, and others pointed at albuminuria, and when, in 1843, Dr. Lever said *Eureka*, his co-workers hailed the discovery for a time with admiration and faith, which have gradually grown less to the present time. Dr. Lever thought the convulsions the result of uramic poisoning, the evidence of which was the albuminous condition of the urine, which he invariably found in this disorder. He furthermore held that pressure of the fætus impaired the free or normal action of the kidneys, causing albuminuria, and he adhered to this view to the last.

The theory of Dr. Lever, substantially, has probably been the predominant one entertained and acted upon ever since. Just previous to and simultaneously with this were the theories of anæmia and hyperæmia of arterial cerebral congestion held by some, and venous cerebral congestion by others, with many recorded and traditionary vagaries. A vast amount of labor and ingenuity has been expended in setting forth these causes and classifying them into predisposing and exciting causes, but it is sufficient for our purpose to say that pregnancy, with all the altered conditions of the system incident to it, is the chief predisposing cause. And here, strangely enough, I would remark in passing, the best writers are unsettled to-day whether the convulsions are caused by the albuminuria, or the albuminuria is caused by the convulsions. Here,

¹ Read before the Middlesex South District Medical Society, April 16, 1879.

then, is a field for our labor. Let us each and all help settle the question which is cause and which is effect. To explain, directly after the convulsion there is acute, desquamative nephritis: did the convulsion produce this state of the kidney, or was this state of the kidney anterior to the convulsion, and the cause of it? Prominent gynæcologists may be found to support each side of the question.

The convulsions, as I shall have occasion to state farther on, are epileptiform in character, and it is therefore claimed by some that acute nephritis, albuminuria, etc., must be a necessary sequence of an ordinary epileptic fit in either sex. This, gentlemen, affords us another opportunity to assist in settling this point by carefully examining the urine of our epileptic patients both before and after the fit. A frequent and careful examination of both the urine and the blood in the later months of pregnancy and directly after parturition would do much in aid of answering the question whether there is more than a normal amount of urea circulating in the blood, or whether there is albuminuria in all cases of convulsions and prior to them.

It was a well-recognized fact that in chronic forms of Bright's disease uræmia existed, and the frequent occurrence of convulsions in that disease were due to toxæmia, resulting from the retention of urea in the blood. While Frerichs, Braun, and others substantially supported this view, the former modified it so far that he held that the true toxic element was not urea as such, but carbonate of ammonia, resulting from its decomposition. Here, again, has been expended much patient investigation and learned research to settle this question.

About 1861 Dr. Hammond, of Maryland, and other eminent men, after much experimentation, would not concede that urea ever was changed to carbonate of ammonia in the blood. In 1870 Spiegelberg, after experiments on human and canine subjects, supported the theory of Frerichs, while Barnes and others believe that eclampsia may be due not to urea, nor the products of its decomposition, but to other poisonous irritants or excrementitious matters not cognizable to the chemist. Playfair, whose beautiful system of midwifery is familiar to most of you, says it is highly probable that in some cases convulsions and albuminuria are produced by the same cause, and appear simultaneously.

While it is generally conceded that puerperal convulsions are preceded by albuminuria, and that the two are always combined, some assert that eclampsia now and then occurs, though very rarely, without albuminuria, or rather previous to it; first the convulsion, then albuminuria. Braxton Hicks is one of the chief supporters of this view, and is quoted by Playfair. Hicks reported four cases about a dozen years ago, which were published in the eighth volume of Obstetrical Transactions in London; but on examination I find he had seen only two of them personally and in consultation, while the other two were reported to

him; and if they were observed as poorly as they are reported, they are not entitled to much reliance. But the two seen by Hicks are far from being conclusive in my mind. Cazeaux had heard of but six cases, all of which, he says, can be satisfactorily set aside. This, then, is a question to be kept distinctly in mind, and answered by our future observation and experience: whether convulsions ever precede albuminaria in any fairly and accurately observed case. My personal belief is that none such exist. The views of Hicks led him to sav, "The nearly simultaneous appearance of albuminuria and convulsions must then be explained in one of three ways: First, that the convulsions are the cause of the nephritis. Secondly, that the convulsions and the nephritis are produced by the same cause; for example, some detrimental ingredient circulating in the blood, irritating both the cerebro-spinal system and other organs at the same time. Thirdly, that the highly congested state of the venous system, induced by the spasm of the glottis in eclampsia, is able to produce the kidney complication."

As none of the theories thus far advanced would satisfactorily explain all the cases that presented, Traube and Rosenstein have assigned acute cerebral anæmia as the cause of eclampsia. In parturient women the blood is ordinarily hydræmic, and when there is albumen the watery condition of the blood is greatly intensified. Accompanying this condition of the blood and the patient, hypertrophy of the heart is said to be normal, and as a result of these combined states is a temporary hyperæmia, which is rapidly succeeded by serous effusion into the cerebral tissues, resulting in pressure on its minute vessels and consequent anæmia. Kussmaul and Tenner have shown more recently the dependence of convulsions on cerebral anæmia, and Brown-Séquard that an anæmic condition of the nerve centres precedes an epileptic attack.

Nearly all of these fine theories call in to their aid the energetic pains of labor as a factor in the causation of convulsions, and, theoretically, they would explain very satisfactorily how the occurrence of labor should intensify the convulsions, since during the acme of the pains the tension of the cerebral arterial system is necessarily greatly increased. But, unfortunately, the convulsions nearly as often occur some hours after the labor is ended. I have not taken pains to procure statistics to show the relative frequency of ante-partum and post-partum convulsions, but the latter are not rare. Moreover, these theories utterly fail to account for the cases which are preceded by well-marked precursory symptoms, and in which an abundance of albumen is present in the urine. Here the premonitory signs are precisely those which precede the development of uræmia in chronic Bright's disease.

If you have thus far been able to follow me while I have so hurriedly and imperfectly passed in review many of the theories of the ætiology and pathology of the disease entertained by the best practitioners and

writers during the last forty years. I would like to say here that in order to have our future observations and investigations of any value, we must all stand on the same platform and have the disease now under consideration so sharply defined as to be in the focus of observation. and exclude all others. In other words, some writers have hitherto unquestionably included cases of hysteria, epilepsy, and even apoplexy in their list of puerperal convulsions. Playfair says, "In most obstetric works it has been customary to describe three distinct classes of convulsions: the epileptic, the hysterical, and the apoplectic." But a parturient woman, either before or after delivery, may suffer from hysterical paroxysms, or she may be attacked with apoplexy accompanied with coma and followed by paralysis or death. But these conditions are identical with the same diseases in females not bearing children, and are in no way special in their nature. In true eclampsia the paroxysms are always epileptiform, and are essentially the same in appearance as those of an ordinary epileptic fit, but their clinical history is different. It is true that the premonitory symptoms of an attack are rarely heeded either by physician or attendants, and consequently the whole house is suddenly startled by the unexpected paroxysm. Nevertheless, there are precursory indications which should be kept constantly in mind by the obstetrician, the most common of which are severe headache, transient attacks of giddiness, confusion of thought, impairment of sight, disjointed remarks, and these symptoms, especially when coupled with cedema of the face or upper extremities, are always ominous. Convulsions with these symptoms, attended also with albuminous urine, may unhesitatingly be pronounced puerperal.

The attack is sudden. The eyes turn obliquely up under the lids, and the head slowly rotates in the same direction; the countenance is terribly distorted, and assumes a horrible expression; the mouth froths, which is soon tinged with blood, unless the tongue be promptly protected. The face soon becomes livid and frightfully altered; the veins of the head and neck are full, hard, and enlarged; and the patient struggles, shudders, and quivers till the paroxysm subsides. This state of things is sufficient to call into requisition all the physician's resources, even when he is not distracted by the incessant inquiries and exclamations of friends; but the whole household is wild with excitement, and all ask questions and want categorical answers; there is no opportunity to deliberate. As any of us are liable to be called to such a case before we sleep, it is well to carefully consider and determine our course of procedure in advance. To assist us in this, allow me to give the

minutes of the last case that came under my notice: -

July 25, 1876, at four o'clock, P. M., I was called in haste to Mrs. W., thirty-two years of age, who, with but thirty minutes' sickness, had surprised herself and friends by giving birth to a child, a girl, weighing

six pounds. With gentle traction at the cord I removed the placenta, and soon had the mother and child very comfortable. Mrs. W. had borne two children previously, and had been attended in both instances by a physician in a neighboring town, where she then lived, whom she had engaged to be with her in this confinement, but she was surprised, and had no time to send for him. She confessed to having had some slight twinges of pain for eight hours before the child was born, but did not think she was in labor, and ate and exercised with the rest of the family. Although her delivery was sudden and without an attendant, there was no laceration of the perinæum, and the patient laughed more than once during this interview at the surprise her sudden accouchement had given herself and all her friends, and I left her between four and five P. M. in the best of spirits and perfectly comfortable. That night between twelve and one o'clock, July 26th, I was called to see her in a fit. When I arrived the convulsion had ceased; she was conscious, but her head felt unpleasantly, and so did her chest from her stomach to her pharynx. She had suffered thus for an hour or more previous to the fit, but from the description by herself and attendants I supposed the fit might be hysterical, treated it as such, and returned to my rest. But I had hardly reached my bed when she had another fit, and I was called again. This convulsion had also subsided, and her consciousness had returned when I reached her the second time. I still thought her trouble might be hysterical, and gave her a liberal dose of morphia, and myself the lounge to await the result.

Her first fit was at 12.30 A. M., her second at two o'clock, A. M., and at 3.40 A. M. she had the third fit, which was the first I saw, and which satisfied me I had something to contend with more than hysteria. From this time she neither swallowed nor was conscious, but lay constantly in a comatose condition. Her former physician, Dr. Willis, of Waltham, saw her in consultation, and at 4.50 A. M. she had another fit. Dr. Willis administered one fourth grain of morphia hypodermically, took urine by catheter, and found it highly albuminous. She had a fit at 5.80 A. M. and at 6.30 A. M., after which we decided to keep her under the influence of ether. At this time her pulse varied from 90 to 96, and was slightly intermittent. I administered the ether myself, and from her profoundly comatose state between the convulsions it was not easy to determine when she had inhaled just the right quantity. She did not now move a voluntary muscle between the convulsions, which took place at 8.30 A. M., at 10.45 A. M., at 12.30 P. M., and at two o'clock, P. M., when she had her tenth and last fit. Her respiration during these convulsions was of course spasmodic, and more or less stertorous all the time. The severity of the last convulsion, with her cyanotic and exhausted condition, satisfied me she could not survive another such fit. Her friends were telegraphed, and her energies seemed to be sinking. The muscles of the neck were rigid, and drew the head backwards; there was opisthotonos, as in well-marked tetanus. During her first convulsions she had bitten her tongue badly, and during the subsequent ones frothy mucus tinged with blood escaped from her mouth, into one side of which I crowded a thickly folded napkin, to guard against any further injury to the tongue.

I ceased to give her ether at a quarter past three o'clock, P. M. At this time she was in a profoundly comatose condition. Her breathing for some time previous had been growing shorter and more thoracic. Her eyes had no expression of life; her face grew more and more livid or cyanotic; her feet, hands, and arms, which had been dusky for some hours, seemed to be taking a deeper hue; and the blood under her finger nails was a dark purple.

Dr. Willis saw her again with me about four o'clock, P. M., and after remaining with her an hour we agreed that she was in a moribund condition, and that we could probably be of no further service to her, and

dition, and that we could probably be of no further service to her, and we retired. I called three hours later in the evening, found her living, and her hands a trifle less dusky; other appearances the same. Early in the morning, July 27th, I called again, and learned she had swallowed in the course of the night, and then I satisfied myself that she would

sip tea from a spoon and swallow it.

From this time she rallied, and is now perfectly well. Her recovery was very gradual; her consciousness did not fully return for nearly a week. For several days she lay with her eyes closed, and for two days they appeared to be covered with a film, and looked like the eyes of a person deceased. Her evacuations were passed unconsciously for four days, but each successive day showed an improvement on her previous condition till August 5th, the twelfth day after her confinement, when she suddenly had puerperal mania, imagining all sorts of things, especially that she had taken something which she ought not to, and that she should die that night, etc. She persistently declined to swallow anything for some hours, took her leave of all the family, etc., but in the morning following she was calm and herself again.

Her previous two labors had been of the ordinary type, and she had nursed her two children; but after this confinement there was no secretion of milk whatever. During her convalescence there was nothing peculiar in her treatment; for diet she at first had brandy and milk, afterwards milk without the brandy, then broth, beef tea, etc. She took but little medicine, chiefly bromide of potassium, sweet spirits of nitre, with now and then a Dover's powder, and finally the muriated

tincture of iron.

Many of you may recall the case reported in the Boston Medical and Surgical Journal, March 13, 1879, by Dr. O. W. Doe, of Boston, in one or two respects not very unlike my own. The convulsions were post

partum, occurring six hours after delivery instead of nine hours, as in my The patient was thirty years of age, the wife of a physician who lived in Boston, and in a few minutes had at her bedside several of the best obstetricians in Massachusetts, if not in New England. She "had a very severe convulsion lasting fully fifteen minutes." Dr. Calvin Ellis, being called, administered ether. Dr. George H. Lyman arrived a few minutes later, and gave half a grain of morphine hypodermically. Dr. Francis Minot, coming soon aftarwards, indorsed the treatment, and advised the continuation of morphia pro re nata, and suggested chloral per rectum, which was subsequently given. Still later, enemata, elaterium, croton oil, blood-letting, hot-air bath, and pilocarpine were in turn resorted to, and in less than eleven hours the patient took ether (the quantity not known to the writer, nor the manner of taking it); of morphia hypodermically one half grain, one fourth grain twice, and by the mouth one fifth grain; of chloral twenty grains per rectum; four enemata -- one of soap-suds and sweet oil, one of soap-suds, sweet oil, and turpentine, which was repeated, and one turpentine enema with two drops of croton oil, and one drop upon the tongue; four one-fourthgrain doses of elaterium in butter placed on the tongue; venesection from the right arm resulted in the abstraction of one pint of blood. The hot-air bath was administered by Dr. Bradford. Muriate of pilocarpine one sixth grain was given hypodermically, and repeated.

The treatment in this case is entitled to our very careful consideration. It is the most recent treatment we have for our guidance, and most assuredly it is not what we know as "expectant" treatment. And if some of us regard it as "heroic," very heroic, we must bear in mind the source from which it emanates. This patient made a complete recovery; but had she died, and had we been called upon to give our verdict as to the cause of death, we might have found it embarrassing to decide whether she died of the disease or of the treatment.

But I wish you particularly to note the blood-letting. A few minutes before it the pulse was 108, respiration 14, and the report says: "10.15 A. M., face remained markedly cyanotic. Bled to the extent of a pint from the right arm by Dr. Minot. Pulse 104 directly after the operation. 11.35 A. M., countenance as livid as before the operation." So we see that an hour and twenty minutes after venesection the countenance is not improved, and the pulse only four beats less than before it.

Twenty or thirty years ago there was a publication in England called the London Lancet, and in the pocket of every surgeon and physician was a surgical instrument by the same name; and this instrument was used on nearly all occasions, nor has it become entirely obsolete yet. Even Playfair, from whom I have several times quoted, approvingly says: "Until quite recently venesection was regarded as the sheetanchor in the treatment, and blood was always removed copiously, and

there is sufficient reason to believe, with occasional remarkable benefit.
. . . But while the effects of venesection have been so lauded by certain authors, the mortality has admittedly been lessened since its indiscriminate use has been abandoned."

Dr. Fordyce Barker states that in 1855 the mortality was thirty-two per cent., but has now fallen to fourteen per cent. Against his better judgment the physician is sometimes impelled to practice some bold, decisive, and observable treatment to satisfy the impatient and irrepressible anxiety of relatives. Until the pathology of the disease is more accurately known, can we do better than to protect the patient's tongue by placing a pine stick or folded napkin between the teeth, give ether or chloroform, supplemented by bromide of potassium, chloral, or morphia?

PROCEEDINGS OF THE BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.

E. G. CUTLER, M. D., SECRETARY.

FEBRUARY, JUNE, AND SEPTEMBER, 1879. Uramic Apoplexy. - Reported by Dr. Minor. A gentleman between fifty-five and sixty years of age, single, was brought to the Massachusetts General Hospital, January 28, 1879, in an unconscious condition. The history, obtained from the friends, was that he had fallen on the stairs five weeks previously, striking on the temple, and had complained of headache afterwards, but was able to attend to his business. His habits were perfectly good. On the morning of his entrance he was found in his bed unconscious, with stertorous breathing, pupils normal, unable to swallow, the head drawn to the left, the right arm and leg paralyzed, and the face flushed. A cicatrix on the right side of the tongue near the tip was noticed, which was not recent. On the 29th it was observed that there was some movement in the right leg, and occasionally in the right arm, and that the left eye was more open than the right. The head was turned to the left side. Micturition and defæcation were involuntary; the temporal arteries were seen to pulsate strongly; the inspirations were 32 in the minute, and were stertorous. On the morning of the 30th, two hours before death, he was suddenly seized with an epileptic fit, lasting two or three minutes, which was succeeded by another an hour later. The urine was acid, specific g avity 1032, and contained considerable albumen, with hyaline and finely granular casts. The temperature on the evening of his entrance was 100.20 F.; on the morning of the 29th, 100.8° F. (taken in the axilla); evening of the 29th, 102.6° F.; morning of the 30th, 100.8° F.; at death, 100.8° F. (the last three taken in the rectum).

Autopsy. January 81st. Brain. There was a thickening and cedematous condition of the pia mater over the convexities, and a small cyst of the size of a grape seed in the right ventricular nucleus. The kidneys were both diminished to about one half the normal size; the capsules were readily detached, leaving a wrinkled and depressed surface from loss of substance. On section

they presented a reddish-gray color, the cortex was much diminished in area, and the pyramids were also atrophied. The *liver* was symmetrically atrophied, weighing somewhat less than two pounds; its density and color were normal. There was hypertrophy of the left ventricle of the *heart*.

The case was interesting from a diagnostic point of view. There was no smell of alcohol in the breath, and no reason existed for believing that the patient was drunk. The low temperature and the examination of the urine showed

that the case was one of uramia.

Large Effusion of Blood into the Left Hemisphere and Lateral Ventricle; Immediate and Continued Unconsciousness without Localized Paralysis; Continued and Marked Rise of Temperature. - DR. ELLIS reported the case. On January 30, 1879, a man fifty-six years old, who had previously enjoyed good health, suddenly fell in the street, immediately became unconscious, and in that condition was brought to the Massachusetts General Hospital. When seen, the respiration was slow and full. The pulse was 64, and of good strength. The pupils were normal. All parts of the body were warm. The urine was passed involuntarily just after entrance. Passage of the catheter made him move both legs and arms with considerable strength. On giving him milk he became slightly conscious and took it readily, but soon vomited it. No marked change was noticed during the next twenty-four hours. There was much restless movement in bed, and the urine continued to dribble away from the bladder as fast as it entered it. Early in the morning of February 1st he became unable to swallow, and the milk ran from his mouth. Respiration got to be more stertorous. He turned his eyes towards people entering the room, but could not be roused even by shouting. In the afternoon paralysis of the right arm and leg was noticed. The head was drawn to the left, and the mouth twitched spasmodically on the left side at times. He continued in this state till the next forenoon, February 2d, when he died. The urine was not examined, owing to the inability to get enough to do so.

During this time the temperature rose steadily. Beginning at 98 F., when he entered the hospital, it was normal in the evening; 99° F. in the morning of the 31st, 100° F. in the evening; 101° F. on the following morning, 104° F. in the evening; 104\frac{4}{8}° F. on the morning of February 2d, and 106\frac{1}{8}° F.

just before death, the rise being very rapid.

The pulse on the evening of the first day was 64, fell to 56 the next morning, rose again to 60 in the evening, then fell to 58 on the morning of February 1st, and from that point rose rapidly to 120 in the evening. The respiration was about 20 from the time of entrance till the morning of the

last day, when it began to rise, and in the evening was 30.

Autopsy. The surface of the pia mater was remarkably dry. The cerebral convolutions were flattened; the veins of the pia were moderately full. The arteries at the base of the brain were thickened and stiffened by numerous atheromatous formations. The left lateral ventricle contained a dark-red, recent coagulum of the size of a pullet's egg and a little fluid blood, some of which was also found in the third and fourth ventricles. The inner surface of the greater part of the left lateral ventricle outside of the corpus striatum and optic thalamus had a roughened, lacerated look, attributable, apparently, to the fact that blood had been first effused into the substance of the brain, cutting

away the external portions of both the thalamus and corpus striatum. The lining membrane of the ventricle being then ruptured, the lacerated tissue appeared as a part of the floor of the ventricle. Nothing unusual was noticed about the right lateral ventricle. In the gray matter of the convolutions of the left side and in the left ventricular nucleus about six miliary aneurisms were found, but no point from which the blood had escaped. Nothing else of special interest was observed.

When the patient was first seen there was no localized paralysis, while all parts of the body were moved, but feebly. Though not entirely unconscious, the signs of realizing what was said or done about him were so slight that they might have been automatic. The difficulty in making the diagnosis lay in the absence of any symptoms for analysis. It was clear that the brain was seriously affected, and obvious that the whole nervous system had received a violent shock, as shown by the steady rise of the temperature, the partial immobility, and the dribbling of the urine, caused by the relaxation of the sphincter. The condition was such as might follow hæmorrhage beneath the pia mater, or in rare instances into the substance of the brain itself. When the paralysis of the right side was noticed, just before the patient's death,

hæmorrhage into the left hemisphere was at once made probable.

Strangulated Hernia unattended by the Usual Characteristic Symptoms; Autopsy. - Dr. Nichols related the ease, which illustrated the importance not only of making inquiry as to the presence of hernia whenever there exists a disturbance of the abdominal viscera, but also of examining carefully the ordinary seats of hernia. Mrs. S., aged sixty-seven, rather corpulent, had been subject for several years to attacks of abdominal colic, but in other respects had enjoyed good health, and was not conscious of the existence of any tumor, hernia, or other local disorder. The bowels had been evacuated the previous day. On the 26th of May, 1879, she experienced some nausea during the forenoon, but ate a moderate dinner. Soon after violent pain came on at the pit of the stomach, attended with nausea, which disappeared, however, in a measure after a hot foot-bath had been taken. At nine P. M. she took, by the advice of her son, two thirds of a teaspoonful of saleratus in a glass of water. Violent retching and vomiting ensued, which continued throughout the night at intervals of every ten or fifteen minutes, and up to the time of Dr. Nichols's first visit, about one o'clock in the afternoon of the 27th. She was found at that time in bed, with a distressed and exhausted look. It was stated by those in attendance that her hands and feet had been cold, but this was not the case at the time of the visit. The pulse was 75, rather small and hard. The abdomen was exposed, and found to be no more prominent than would be expected in a woman of her build; there was nowhere any tenderness upon pressure or manipulation, no tension of the abdominal parietes, nor could any intestinal tumor be detected. In reply to questions, she denied absolutely the existence of any pain beyond the distress in the region of the stomach, which she ascribed to the effects of the long-continued retching. An eighth of a grain of morphia was given subcutaneously, and hot fomentations and enemata were ordered to be used subsequently. She was visited again at eight in the evening, when it was ascertained that the

vomiting had been arrested for about an hour and a half after the administration of the morphia, but that it had returned again with its former frequency after a small quantity of Apollinaris water had been drunk. A quarter of a grain of morphia was then injected, and the patient watched for half an hour, when, as there had been no vomiting and the woman pronounced herself confortable, she was left in charge of the nurse for the night. In response to an urgent message, she was visited at ten o'clock the next forenoon, the 28th, and found to be pulseless and in articulo mortis. There had been no return of the vomiting during the night, extreme thirst and restlessness being the only symptoms complained of.

The autopsy was made by Dr. E. G. Cutler, and a strangulated inguinal hernia of the right side was found. The hernial sac was of about the size of the last joint of the thumb, and was nearly filled by a portion of the omentum, firmly adherent; in addition, a small knuckle of the ileum, about the size of a bean was found to be nipped by the inner ring. The calibre of the gut was not perceptibly diminished by the incarceration; it was of a chocolate cofor, and was covered by a thin false membrane. A relatively small amount of fluid fæces filled the intestine above the hernia, while below it was empty. There was no general peritonitis and no gangrene. The rapid sinking appeared to be fairly attributable to the exhaustion induced by the violent retching and vomiting, which had been maintained for a period of sixteen hours.

DR. F. C. SHATTUCK said a case occurred in the Massachusetts General Hospital while he was a house officer. Vomiting was the prominent symptom, and strangulated hernia being suspected, two of the surgeous were requested to decide on the question of operation; they gave a negative decision, and two days after the patient died. At the autopsy a very small fragment of the intestinal wall was found to be nipped, while the lumen of the gut was not diminished.

DR. C. D. HOMANS related a similar case.

Perforation of the Bladder through the Rectum. - DR. BEACH reported the following case: A boy sixteen years of age while sitting upon a window sash, not containing glass, by the giving way of the frame was let down upon one of the uprights, which entered the rectum through the anus, and passing forward above the prostate gland perforated the bladder. The patient pulled the piece of wood from the wound, and a copious hæmorrhage followed, which continued at intervals through the day and night. He was sent to the Massachusetts General Hospital on the following day, and upon examination it was found that if the anus were dilated, bloody urine would flow out. The laceration of the bladder was located just above the prostate gland, and would easily admit two fingers separated about half an inch. A catheter passed into the bladder evacuated some bloody and putrid urine. A soft rubber catheter was substituted and kept in the bladder permanently; another was retained in the rectum, and the patient placed on a bed-pan. The wound was constantly bathed with an aqueous solution of thymol by injecting it into the bladder, from whence it passed to the rectum, and thence out by the rectal catheter into the bed-pan, so that if infiltration occurred it would be produced by a less dangerous agent than putrid urine. A milk diet was insisted on. During the first few days after entrance into the hospital the patient had some abdominal tenderness and distention, requiring, however, but one opiate to relieve pain. No urine came through the rectal tube after the sixth day. The catheter was finally removed on the fifteenth day. Three weeks after the accident he was eating house diet. and had passed his urine without pain or difficulty for a week. His temperature when he entered the hospital was 101.3° F., and the pulse 112; both steadily lowered until the day he left the hospital, well, on October 12th, twenty-seven days after the injury. A rectal examination by the speculum disclosed the wound healed by a firm cicatrix. A full bladder might account for the fact that the peritoneal sac was not opened. The urine had no other odor than that of the thymol from the time it was used. Mr. Prescott Hewitt reports a case 1 in which the rectum and urinary bladder were transfixed by the patient falling upon the broken leg of a chair. Death resulted from peritonitis dependent on extravasation of urine into the peritoneal sac. Mr. Buce, of Slough, reported to Dr. Beach a case in which recovery took place. A man forty-six years old, while sporting with a companion, was pushed off a cart-load of fagots and fell on a stake driven into the earth. The stake, passing through the anus, pierced the walls of the rectum and tore the posterior region of the bladder immediately behind the prostate gland. The index finger was passed into the bladder through the wound. The man complained of intense pain. He was bled, and a full dose of opium administered. Mustard cataplasms and fomentations were applied over the abdomen. He was kept in bed, and in two months after the injury the urine was voided by the urethra!

Chronic Parenchymatous Nephritis; Hydronephrosis. - Dr. LYMAN reported the case. The patient was thirty-seven years old, and had suffered from several attacks of acute articular rheumatism, and had also had gonorthea a number of times. He entered the City Hospital complaining of dyspnes and palpitation on exertion and cedema of the feet and legs. The area of cardiac dullness was increased, and there was a soft systolic souffle at the apex, with a harsh, rasping murmur heard over the aortic valves with the second sound. On examining the abdomen there was found to be an unusual prominence on the right of the median line in the umbilical region. caused by a symmetrically ovoid swelling, dull on percussion, fluctuating, without tenderness, of the size of a large cocoa-nut, and which the patient had had since his seventeenth year. The dullness extended far back on the right side. After a few days the patient had increase of dyspnœa, with rusty sputa and cough, together with slight elevation of temperature, while a physical examination revealed crepitant râles throughout the right lung. The urine was of very low specific gravity, contained two per cent. of albumen and large numbers of granular and fatty casts, together with renal epithelium. The dyspnœa continued to increase in spite of all measures looking toward relief, and the patient finally died comatose.

At the autopsy there was found to be red hepatization of the right lung; the left ventricle of the heart was much hypertrophied; the valves were healthy; the left kidney was nearly six ounces in weight and of a dull whitish-yellow color; the tubules were opaque, and on microscopic examination were seen to

¹ Holmes's Surgery, vol. ii. p. 722,

have an extremely granular and fatty epithelium, and in many places to be filled with casts. The tumor in the right side was observed to be the remains of the right kidney, which was represented by an enormous fibrous sac with several irregular protrusions, evidently the former calices. No kidney substance remained; the ureter of the kidney was of normal size and pervious; it entered the sac at a right angle with its largest diameter, which was in the axis of the body and under a thin valve-like membrane some two inches in length, like the opening into the bladder. The right renal artery and vein were not abnormal either in size or in position.

DECEMBER 8, 1879. Direct Inquinal Hernia. - Dr. FIFIELD related the case. A patient entered the City Hospital reporting that he had never had hernia before. On examination, there was found to be an inguinal hernia the size of the fist; as prolonged and repeated taxis had evidently been practiced outside, the patient was not further molested, but was sent to the ward, and a poultice placed over the tumor, which was soft, and though irreducible was productive of no pain or other subjective symptom. The next morning he reported himself as comfortable, and from day to day averred that flatus passed from the bowels naturally. The hernia was therefore believed to be omental; but a few days after, on grasping the tumor, it was felt to contain intestine, which could be pushed into and within the ring; it was not painful. One evening he was found with an elevated temperature and some vomiting, and it was believed on consultation that some inflammation was going on in the omentum; the intestine was easily reduced by gentle taxis, but the omentum could not be. On operating, it was found that there was an exceedingly thick, large sac, and on dividing the sac and ring a thick rope of omentum was seen to be most intimately attached to the sac. The patient died the next day, and at the autopsy the omentum was found to have descended into the sac and to be adherent to the bottom and sides of the same. A careful dissection of the omentum showed that it had formed a bag into which a fold of the intestine had descended; above in the abdominal cavity a portion of the fold had been attached to the walls of the ring by old adhesions. The gut was of a dark purple color, and was marked by a deep sulcus where it was constricted, but the continuity of the lumen was not interrupted. hernia was direct, and had evidently existed many years. Dr. Fifield had never seen such a hernia before, and did not know how it could have been discovered, either before or indeed during an operation. If intestine were present in the cavity of the omentum and detectable by percussion, then when the omentum was divided and turned back it might have been seen.

DR. WARREN said he had recently read in Gosselin's Surgery of similar cases. The sacs are said to be usually very large, and strangulation does not occur, though it seems to be impending, the symptoms passing off after a time. The intestine is ordinarily not adherent.

DR. FIFIELD further said that the usual sound when intestine is returned by taxis, "gluck gluck," was not heard here, as it was concealed by the presence of the omentum; the sound was a peculiar crack or snap. Dr. Fifield referred to another case, previously reported to the society, where a man formerly the subject of hernia fell and caused a separation, with rupture, of intestine adherent at the ring, as was proved by autopsy.

Slight Perineal Lacerations. - Dr. LYMAN read a paper on slight perineal lacerations, which he said were extremely frequent in women who had borne children, so much so that Schroeder estimated that they existed in over one third and Olshausen in over one fifth of all parous women. He said that no laceration extending beyond the fourchette sufficiently to leave a recognizable cicatrix is unimportant, for no such lesion is without injurious effects in many ways. The more common results which may ensue, if enumerated somewhat in the order of their gravity, and more or less likely of course in proportion to the extent of the laceration, are, primarily, septicæmia, and, secondarily, sterility, cystocele, rectocele, and prolapsus, with consequent derangements of the pelvic circulation, as endometritis, cervicitis, cystitis, and leucorrhœa, imperfect coition, pruritus, vaginal flatus, and extensive reflex neuralgic irritation from the cicatrices. This formidable list might be extended without exceeding the reality. He did not mean that all, or many of them perhaps, occurred in every case, but in the majority of cases one or more of them were tolerably common. He urged that the perinæum should be thoroughly inspected immediately after labor, and if any laceration be found, however slight, a sufficient number of sutures should be introduced to retain the edges in contact, exclude the lochial discharges, and allow the parts to heal by first intention, instead of by granulation with its necessary accompaniment of cicatricial induration. He closed by calling attention to the admirable paper of Dr. Reamy, of Cincinnati, in one of the volumes of Transactions of the American Gynæcological Society.

DR. REYNOLDS opened the discussion by saying that he hesitated to occupy the attention of the society with suggestions upon these points, which have so often been treated of. He could not forbear taking the opportunity of directing the attenion of members of the society to a paper by Dr. David B. Hart, which is to be found in the Edinburgh Medical Journal for April, 1879, in which new and striking views of the anatomical details and the functions of the floor of the pelvis in woman are set forth with great force and clearness. The paper, when read in the Edinburgh Obstetrical Society, attracted unusual attention, and cannot fail to interest greatly members who find time to examine it. A thorough appreciation of the facts which are there touched upon is essential to the formation of intelligent opinions upon the subject now before the society, as well as upon other gynæcological and obstetrical questions of still greater moment. It was worth while to remind practitioners that under the most careful management laceration of the perinæum will occur in a considerable percentage of primiparæ. Thus Schroeder, in urging the advantage of what is substantially a knee-elbow position at the moment of expulsion, admits that in that attitude forty-three per cent. of women confined for the first time show some degree of laceration, while real tears occur in about twenty-four per cent., or once in every four cases. On the back, these proportions are increased to half as much again. This is to be understood as applying only to cases which present no unusual difficulty. Where special obstacles, such as a narrow pubic arch, forcing back the end of the head upon a greatly stretched perinæum, or the expulsion of a vertex by backward extension, complicate the delivery, ill-luck must be expected. The passage of the posterior shoulder. with its sharp, irregular outline, brings even greater risk than that from the round, smooth head; and it seems not impossible that now and then the unguarded exit of a heavy placenta may tear a perineal edge already bruised. softened, and stretched, even when the whole child has been expelled without harm. It was worth while to remind gentlemen that in fair cases of extraction by forceps the attendant is rightly held to have more than the ordinary chance of protecting the perineum, and is in fault if he allows any bad tear to take place. Dr. Reynolds stated that the details of the management of the expulsion of the child, as seen in the lying-in wards at Vienna, appeared to him judicious. The final exit of the head from the vulva is, if possible, retarded during several pains; pressure is directed toward the arch and away from the stretched perinæum; the head is finally guided out in an interval between two pains. In conclusion, he wished to add his testimony to the great advantage which results from the prompt use of sutures in all injuries of these parts. It gives the accoucheur very little trouble to have always at hand two strong, curved needles and a supply of carbolized catgut. The sutures should be wide and deep. A satisfactory result is to be expected.

DR. RICHARDSON, being called upon by the chairman, said that he agreed entirely with the reader of the paper as to the necessity of the obstetrician paying attention to the minor as well as the greater lacerations of the perinæum. With proper care at the time of the delivery, much future distress and even immediate danger may be avoided. The obstetrician should always examine the perinæum at the close of a confinement, and to be of value the examination must be carefully made, for it will occasionally be found that the lower vaginal wall is ruptured without any apparent fissure through the external skin. Whenever there is a laceration beyond the fourchette he believed that stitches of carbolized catgut should be immediately taken, and to be effectual the stitches must be deep. Union by first intention is thus secured, and the temporary annoyance and distress of a lacerated perinæum avoided. He could not quite agree with Dr. Lyman as to the serious results in the future which might follow a comparatively slight perineal laceration, for he questioned whether gynæcologists were not apt to ascribe too many troubles to a slight loss of the perineal body which were really due to something else; but he did believe that the neglect of even a slight laceration was productive of great temporary discomfort. More than this, he was convinced by experience that not unfrequently septicemia owed its origin to the absorption of fetid lochia by a torn perinæum, although of course the placental site was usually the seat of the primary infection. In all cases of lacerated perinei he was in the habit of especially insisting on the use of carbolized vaginal injections and the local application of carbolized vasolene. He agreed with Dr. Reynolds that the passage of the shoulders very frequently caused the laceration even after the head had been safely born; with a view of forestalling any such danger, he was in the habit of drawing down, in the interval of the pains, the perineal arm. He agreed with Dr. Reynolds as to the danger of using forceps, since he believed that we were able with them to control the head better, and by properly directing it towards the pubic arch to avoid a laceration of the perinæum. This advantage would not, of course, be found in difficult cases. He could not agree with the majority of writers on this subject as to the advantage to be gained by keeping the bowels constipated after sewing up a lacerated perinæum; on the other hand, he agreed with Winckel that it was far better to keep the bowels loose.

Dr. Abbot said he had rarely seen other than slight lacerations follow labor, and had usually considered them of no consequence. He had not been impressed by his patient's complaints of uterine symptoms subsequently. He had seen but one bad rupture in his practice, many years ago, and this he did not sew up. An examination made some time after the labor showed that the scar was one and a half inches long; the patient afterwards had twins, and within a few months he had seen her again, learning that she had remained perfectly well, and made no complaint of uterine troubles. The late professor of obstetrics, Dr. Buckingham, for many years was very careful in the treatment of such cases, but just before his death, in a conversation with Dr. Abot, he said you could not keep the rupture from healing if you tried. With reference to the use of the forceps in preventing the occurrence of laceration, he thought that the matter of anæsthesia should be taken into account also.

DR. HODGES remarked that the comfort which a woman received from having her perinæum sewed up after laceration was such as to deserve attention; and she ought to have this afforded her, as it prevented friction of the surfaces during the process of repair. Thus treated it heals up readily, and by first intention. In regard to the stitches, they should be extremely deep to insure success, and furthermore should be of silver wire, and not of silk, which has a capillary action and creates an irritation along the track of the wound. Catgut he never uses, as it may possibly be absorbed too quickly, and lose its capacity of holding the parts together. The matter of hæmorrhage should also be alluded to; some years ago he had seen a very considerable bleeding occur at the Rotunda Hospital from a ruptured perinæum, where stitches were

DR. WARREN said that as in cases of ovariotomy a particular diet was required subsequently, so in lacerated perinæum, after operation, it was essential to pay regard to this point. According to his experience, liquid farinaceous diet, and especially milk, was productive of a large amount of fæces, while liquid animal diet he found to be the best in this respect. Several cases in point were cited. He avoided a movement of the bowels for eight days, and then insured one daily.

DR. FIFIELD remarked that Goodell commended the immediate, or primary, operation after delivery, though he places but little reliance on its success; he uses silver stitches. The secondary operations were more likely to prove successful. Tait also places but little reliance on primary operations. He himself in delivering women always placed them on the side, and guided the head over the perinæum by inserting the fingers into the rectum, thinking that he was thus more successful in avoiding rupture.

In closing the discussion Dr. LYMAN said he had also had one case of hæmorrhage similar to that mentioned by Dr. Hodges. He considered that if the

sutures were introduced deep enough at primary operations they would be efficient. He considered that the fact of non-complaint to the practitioner by the patient was no criterion of her condition, for women expect a certain amount of discomfort as the result of bearing children.

Sanitary Organization of Nations. — Paper by Dr. Bowditch. He deemed that the time had arrived when the subject of the public health of nations should be placed under the guardianship of international law; that nations have as much right to prevent the spread of contagious diseases from one country to another as they have to prevent rapine and plunder, and quite as much right to blockade, if need be, Cuba to keep off yellow fever as England and America had a right to blockade Africa to prevent tha horrors of the middle passage.

Dr. Bowditch thought that the United States government could most appropriately invite other nations to such an international sanitary congress, and that it was its sacred duty to so: first, because its government came from the people; second, for want of some such agreement among nations we have often suffered from the incursions of fatal epidemics; third, because of the result of the recent support by Congress of the National Board of Health in its dealings with yellow fever at Memphis. The brilliant results there obtained prove what immense power for good a nation and a combination of nations may have.

Dr. Bowditch then gave his views upon the proper form of sanitary organization for a nation, and he took the ground that, first, there should be a secretary or minister of health, with a seat in the cabinet, to hold office for six years, and to ensure the choice of a person fitted for the office the Academy of Science and the National Board of Health should present one or more candidates for selection by the sovereign executive. Said officer should be president of a national board of health, and act by and with their advice, and be their executive officer.

Dr. Bowditch thought that the National Board of Health should consist of men resident in Washington, and drawn chiefly from attachés of the various departments, to whom should be added one or more civilians, so as to form a board of nine members, all of whom could readily and speedily meet for consultation. These with the secretary would immediately put themselves in relation with state or department boards of health. The National Board should also be prepared to nominate to the sovereign executive a person fitted to be the representative of the nation at an international congress. It would have its eyes over every portion of the nation, and know precisely the sanitary condition of each locality.

In cases of great peril it might summon one from every state or department board of health to sit in council upon the sanitary needs of the nation.

Finally, when treating of state sanitary organization, he spoke freely and frankly of the present unfortunate position of the Board of Health of Massachusetts. He held it up as a warning to other States not to imitate her in mixing different subjects, of charity and so forth, or any other, however good, with sanitary work, to the injury of both. He regarded the law passed last year as a huge folly, threatening disaster to the whole subject of public

health in the State. He hoped that in a few years the Board of Health would be left to carry out its own purposes, untrammeled by matters of charity or lunacy. He alluded to the numberless ways in which a free board could carry on its noble object of educating the people in sanitary knowledge, and of actu-

ally improving the public health.

In discussing the paper, Dr. Folsom said that to have a secretary of an international board was not a good plan, because it would be of no advantage to the board or nation, but rather a disadvantage to both. The chief danger to the United States is from Havana, and the Spanish authorities could not probably be made to do much. To have a secretary of the National Board was not good, in that there was so much danger of clashing with the advisory council, and it was important that the chief medical officer should give the greatest part of his attention to sanitary matters, and to nothing else. Nearly all the sanitary work of value done this summer at the South was that of the National Board, except in New Orleans. It was of no advantage to have the members of the board live near Washington, as was shown this summer; and there was a great advantage in having them represent different sections of the country. He hoped that the present organization would not be interfered with. He did not entirely agree with Dr. Bowditch in his idea of matters in Massachusetts; he thought the health department had not lost a very great deal, and, on the other hand, the others had gained something. He could not say it had been a disastrous result; more power had been given to the health department in certain ways, as, for instance, they had a supervision over state institutions, though he considered it a blunder.

Dr. Durgin, who had been invited to be present, thought that one of the chief objections to having a secretary of the National Board in Washington was that it was unnecessary. With an international board we could secure an inspection of vessels on leaving port. He thought there should be an inspection every six months at least before loading the cargoes. Ships should be thoroughly cleaned and disinfected, not only above, but also underneath, and everything should be washed and scrubbed, even to the knees and ribs and between them. He thought there should be state boards of health in every State, and city boards in every city or town, and that their action should be harmonious. Lawyers, engineers, and physicians should compose the boards, and should be appointed for long periods or for life, with good salaries. The several societies of these classes of men should elect members to these boards of health, and where towns neglect to do this the government should do it for them. United action would give great strength and good work, and should be encouraged by the medical profession. One uniform return should be made to the National Board every week, and thence an abstract sent back to all the boards, where it could be utilized.

EPHRAIM McDOWELLA

Among the many triumphs of American surgery none is more brilliant than ovariotomy, and there is not one which has won its way through more of opposition and misrepresentation; and now that its merits are universally recognized, it is right that its originator should have his well-deserved fame so secured to him that others should not hereafter get the credit which his own reticence imperiled. A quarter of a century ago no language was too contemptuous, no denunciation too bitter, for those who dared to countenance such murderous "belly ripping," such unscientific surgery; they were threatened not only with the grand jury, but, what was even more galling to such men, with professional Professional theories, however, must always succumb to facts, and no one in these days is more honored than the successful ovariotomist. When attention was first thoroughly aroused to the possible future of this operation, and investigations into its history were begun, so little was known of McDowell, so modestly and obscurely had he reported his cases, that it is not strange that others should have been allowed the prior claim, and it remained for Dr. Gross, at a later day, when the facts were more accessible, to establish beyond question the claim of the distinguished Kentuckian.

The present small volume contains, with some notes of the other proceedings, the oration of Professor Gross at the dedication of a monument erected to the memory of McDowell by the Kentucky State Medical Society. The eulogy comes very gracefully from one who himself ranks so high in American surgery both as operator, pathologist, and teacher. It abounds in interesting historical facts, and is a welcome tribute to the man himself, and incidentally to the State, which has produced so many other distinguished surgeons.

G. H. L.

GOODELL ON EXTIRPATION OF THE OVARIES.2

This little brochure is a relation of cases in which the author has removed the ovaries for menstrual disorders. As a contribution to the statistics of a novel operation it is of service, but much farther experience in this direction is needed before the procedure can be said to be an authorized or established one. The ratio of mortality is certainly thus far not very encouraging. In certain cases of epilepsy or insanity the operation would doubtless be justifiable, but for the mere relief of the physical suffering arising from ovaralgia, which marriage or the menopause will possibly and probably relieve, — for "troublesome fibroids," the hæmorrhage from which, if subperitoneal, is rare, and if submucous or intramural may usually be controlled by other means, especially by free dilatation of the cervix, perhaps the safest and most certain mode of all, — this operation will hardly be recognized by most practitioners as a proper one. It is by no means certain that the statistics of enucleation would not give more favorable results, and that too with the reproductive organs remaining intact for future use.

¹ Memorial Oration in Honor of Ephraim McDowell, "the Father of Ovariotomy." By Samuel D. Gross, M. D. Louisville, Kentucky. 1879.

² The Extirpation of the Ovaries for some of the Disorders of Menstrual Life. By WILLIAM GOODELL, M. D. Philadelphia. 1879.

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A REVIVAL IN SOCIETY WORK.

In the number of the JOURNAL for July 10th of this year there appeared some editorial remarks on the value of society work, which were unquestionably very timely. Though not leading professional opinion as to the necessity for the infusion of a more vigorous life into some of our medical societies, they doubtless pretty accurately reflected the best feeling of the profession in regard to the short-comings of the societies and what might justly be expected from them. "One of the most obvious defects" was there stated to be "the absence of that feature which gives their peculiar value to the proceedings of a society, the discussions, by means of which the opinions of a number of individuals on a given subject are collected in a convenient and instructive form. A large amount of time may be consumed in the reading of an elaborate paper on a subject with which few members are familiar, and in which none have had an opportunity to interest themselves beforehand, and the reader may congratulate himself if a few intelligent questions are asked by a considerate friend to save his paper from being wholly ignored." The methods in vogue and the results obtained in the New York and Philadelphia as well as the London societies were approvingly cited, and it was finally suggested that "the allimportant element of success is the existence of an active, autocratic, and organizing head, who shall stimulate the lazy, keep down the irrepressible, and make all members feel that membership carries with it a responsibility from which they cannot escape." We reproduce a few of the points made in the editorial referred to because they indicate so exactly the abuses at that time existing, the direction in which reforms were required, and the very method which has since been adopted by one of the oldest, the most honored, and which should be the most useful and earnest of the Boston societies, we refer to the Medical Improvement. Early in the season it reorganized itself by the appointment of a permanent chairman, to which position Dr. J. C. White was elected, and the society may be congratulated upon now having "an active, autocratic, and organizing head," who may be relied upon to perform the functions indicated above. Two meetings have been already held under the new régime with very marked success.

The subject for discussion has been allotted to some one gentleman before the meeting, and certain members notified that they would be expected to take part. We publish in our present number a report of these meetings, which will be found interesting. The Suffolk District Society has for some time back been shedding a brighter and more steady light, and the Observation recently emitted sudden evidences of unsuspected activity amongst its elements, the immediate exciting cause being a paper on tracheotomy, judiciously ignited and scattered in the midst of its most explosive compounds.

Stars of the first magnitude have been known to fade with the lapse of time and to become extinct, but a few others, after receding low in the scale, have astonished observers by rapidly resuming their former brightness. Let us take comfort in the thought. The JOURNAL hopes to contribute its part to this general revival by placing at the disposition of society reports a portion of the increased space which it expects soon to command, thus giving the reports more promptly and, where desirable, more fully; and we hope the secretaries will not consider it necessary to await a second meeting before sending in a synopsis of the previous one. In the editorial from which we quote it is stated that though "our journals were never so crowded with society reports as at the present time, yet the tendency of the general reader to skip this part of the number is, we should judge, upon the increase."

A hearty cooperation in the directions indicated would soon enable us to reverse this testimony.

MEMPHIS TO BE TRANSFORMED.

THE commissioners of the "taxing district" called Memphis have, we understand, accepted the recommendations contained in the report of the committee appointed by the National Board of Health to make a sanitary survey, including a house-to-house inspection, of that place, and the governor of the State has called a special meeting of the legislature to vote a tax, we believe of two per cent., that funds may be on hand to carry these recommendations into effect.

In the report of the committee it was specifically proved that Memphis is sanitarily filthy, badly watered, and badly drained beyond the suspicions even of the most outrageous and disagreeable sanitarian; that many houses and buildings are hopelessly infected with yellow fever poison; and that there still exists in various parts of the city, in junk shops, etc., much presumably infected material. The committee, consisting of Drs. Billings, chairman, Mitchell and Folsom, Messrs. Waring and Benyauzo, recommended that a large number of houses should be condemned, torn down, and the material destroyed by fire (this includes not only foul shanties and cabins, but some large buildings in the heart of the city); the destruction of suspicious bedding and junk; the ventilation in detail and chilling of every house; a system of sewerage, devised by Colonel Waring, to cost only two hundred and twenty-five thousand dollars; a better water supply; a new street pavement; the transformation of the banks of the stinking and unwholesome Bayou Gayosa into a park; the adoption of stringent building licenses and inspection, and the common sanitary policing of a well-ordered city. The report closes with the expression of the opinion that few places possess greater natural advantages for the attainment of that healthfulness so necessary to commercial prosperity, and that by carrying into effect simple sanitary laws Memphis may soon become one of the healthiest cities in the valley of the Mississippi. We hope soon to see it such. It certainly owes the experiment to the rest of the country, and we believe it at last earnestly desires to make it on its own account. In carrying this matter to a successful termination the National Board will deserve the thanks of all.

MEDICAL NOTES.

[—] Dr. Cowles has recently entered upon his duties as superintendent at the McLean Asylum at Somerville, having returned from a six months' tour through France and England, where he has carefully studied the methods of treating the insane.

⁻The medical wards of the Massachusetts General Hospital, which were

recently closed for repairs, are now reopened, and present a bright and invit-

— Referring to teachers of certain medical schools whose final examinations may be compared to a net whose meshes are of inordinate size, the St. Louis Clinical Record, in an editorial on Quackery under the Code of Ethics, says: "Yet these teachers who are so ready to graduate ignorant men to slay the people without let or hindrance are mostly honored members of local societies and of the American Medical Association. They have subscribed to the Code over and over again, only each year to break the faith pledged with so much earnestness. These are the sticklers for professional ethics, etiquette, honor, and glory! If there is such a thing as real, genuine, unadulterated quackery under the sun, then this is the thing in its most atrocious form."

NEW YORK.

— In consequence of the report of a commission of medical men holding positions under the department appointed to make an examination of the affairs of the lunatic asylum on Blackwell's Island, the commissioners of charities and correction have removed the medical superintendent, Dr. W. W. Strew, and Dr. R. J. Kingston, the assistant superintendent, for incompetency, and have directed Dr. A. E. McDonald, superintendent of the asylum on Ward's Island, to take temporary charge of the institution. It is believed by many that eventually Dr. McDonald, who has proved himself an excellent executive officer, will be made permanent superintendent of the two asylums, and will be allowed a medical assistant in each.

- There was recently given in this city a very interesting exhibition of the "audiphone" by its inventor, Mr. Richard S. Rhodes, of Chicago. In introducing him to the audience, Dr. George M. Beard said that he had not thoroughly examined the instrument, but he believed that it would prove more serviceable to those who were almost completely deaf than to those who were only partially deaf, providing the auditory nerve was not destroyed. Mr. Rhodes, who is himself very deaf, then explained the use of the audiphone, which is composed of vulcanized rubber, and somewhat resembles a Japanese fan. The flexible part is adjusted in a semi-cylindrical shape by means of cords attached to it, and held in place by a clamp or wedge on the handle, so that the arc described by it can be arranged to suit bass or treble voices, as deaf persons can appreciate a high-pitched tone better than one of a lower pitch. When in use the instrument is held in contact with the teeth, and Mr. Rhodes made a number of striking experiments with it upon some deaf mutes from the New York Deaf and Dumb Asylum at Washington Heights. It is said that classes are about to be formed in this institution for the instruction of deaf mutes in articulate language by means of the audiphone.

— During the annual session of the American Institute of Architects, which was lately held in New York, the society, at the invitation of the architect, Mr. C. C. Haight, visited the new buildings of Columbia College, and while there listened to a lecture in the School of Mines by Professor Chandler, president of the board of health, on the tenement-house question, which was illustrated by numerous diagrams projected on a screen by the aid of the stere-

opticon. He said that now for the first time was the board able to do something towards reform, backed, as it was, by the law passed by the legislature last year. The result of the recent competition for a model tenement house upon a lot of twenty-five by one hundred feet had brought out two hundred designs, but not one of them completely met the conditions of health and economy. One effect of the law had been that the building of tenements, formerly avoided by architects of ability, and carried on almost entirely by common mechanics, who worked altogether by a conventional rule of thumb, was now passing into the hands of architects of standing, who were competent to cope with this complex problem. It was a question with the board whether the law which exacted ten feet of clear space at the end of a building also applied to the corner houses of a row, but the importance of having a free circulation of air through the centre of the block compelled it to insist upon the vent. In some cases the rules seemed to work harshly, and there were so many modifications of condition that the board of health in its conflict with the owners and builders of tenement-house property would be glad to avail itself of the aid and assistance of educated architects. There were many points about air-shafts and piping in regard to which the board had not as yet arrived at definite conclusions. It had decided, however, that a shaft should not have less than twelve square feet area of cross-section, and that windows opening upon it from bedrooms should have sliding sashes, and have a face area of at least twelve feet. These shafts must be ventilated by an air-duct at the bottom running either to the front or rear of the house, and opening out into the free air. The ventilation of pipes was as yet an open question, and it would probably be the ultimate decision of the board that all traps should be ventilated by special open pipes carried to the roof. An interesting discussion followed Professor Chandler's remarks.

PHILADELPHIA.

⁻ Dr. Carl Seiler exhibited at the last meeting of the County Medical Society a new immersion microtome, consisting of a metal tank about six by twenty inches and one inch deep; in the centre of the floor of this tank, projecting about half an inch, is placed an ordinary screw microtome chamber about two inches in diameter, over the surface of which plays a guillotine section cutter. The extremities of the knife are attached to two brass arms, which by a double bend (or elbow) are carried up and over the side, and there attached by two thumb screws moving in slots in horizontal brass supports, extending about five inches from the side of the trough. In this way a guillotine motion is communicated to the knife, which carries it with a lateral sweep through the structures. The specimens are hardened, as usual; then being fastened in the well, the trough is filled with dilute alcohol, and the sections are cut under the surface of the liquid, and floated off on glass. Sections of the human larynx, a feetal foot, a cat's kidney, and others, all beautifully double stained and mounted, were shown by Dr. Seiler on the screen by the aid of the lantern. He has in preparation a large immersion section cutter, which will enable him to make sections of the entire brain.

⁻It is reported that several cases of mild or modified typhus are now in

the wards of the Philadelphia Hospital. The occurrence thus early in the winter possibly indicates the outbreak of another epidemic similar to that of 1870, which was the last time that typhus prevailed to any extent in this city-

CHICAGO.

—A new rule in the matter of the order of study and examinations in Rush College will soon go into effect, whereby students who attend three full winter courses of lectures before graduating may pass a final examination in anatomy, physiology, chemistry, materia medica, and therapeutics at the end of the second course. This is a step toward a graded system. The graduation fee is to be abolished, and instead an examination fee is to be established which is not returnable to candidates who fail to pass for the degree.

— The new board of county commissioners has got to work, and there is the usual scramble for the medical offices in their gift, — those of county physician, physician to the Insane Asylum, and his assistant.

CRITICISMS ON THE "MAKE UP" OF MEDICAL JOURNALS.

MR. EDITOR,—I have for a long time been treasuring up complaints against the annoyances caused by the make up of the publishers of so many of our professional journals of the day, until at last I have determined to formularize them and send them to you to put in print.

The practitioner who takes his half dozen journals, reads them, and sets them aside as they are, for future reference or for lumber in some neglected corner of his library, probably feels very little of the annoyances which to the lover of order and symmetry in the arrangement and binding of his books are so glaring, and to the librarian so very troublesome. The success and fame of the library of the surgeon-general's office at Washington have so stimulated many of our institutions to increased efforts that it would seem as if this were an age of libraries, and its influence in this respect is being felt throughout the country; the medical man fitted for the duties of a librarian is becoming an important necessity, and he feels keenly these deficiencies and mistakes.

In binding the periodical literature of the day, a custom is becoming prevalent of binding in the advertisements; what a rich field for many purposes this would have afforded had the custom always prevailed, and we could now look over the advertising columns of our grandfathers in medicine! But few of our binders will understand this new innovation of book men, and it is hard to make them appreciate its importance; consequently, for this and other reasons, every careful librarian prepares his own books for the binder just as they are to be finished. His first experience is the hacking of his knife blade, the tearing of his finger-tips, and the loss of his patience in attempting to extract the metal clamps which so many have substituted for the old sewing process. These metal clamps may be all very well for dispatch and neatness, but when they are pasted down and bent in so as to make it impossible to extract them without tearing the paper they are set in, they become an abomination. Verbum sap., Mr. Editor.

This done, the next step is naturally to separate the advertisements; and

where do we find them? Some have to be torn off from three or four pages of the proper text of the journal, making a very ugly job; others are found so scattered or interpolated between the pages of the journal as to destroy all the pleasure of reading the articles. It is certainly very incongruous, to say the least, to break off in the reading, for example, of an article on disorders of the alimentary canal, and to find the next page taken up with an advertisement of somebody's pessary, or, per contra, an article on uterine flexions, having its text continued by a new preparation of pepsine. When these are searched out and put in their proper places, the arrangement of the text by paging comes next. Here is a new trouble which sometimes puzzles us all: the paging goes on in some journals through all the advertisements, in others through a part only (and the latter is the worst), until finally we come to disregard the paging altogether.

Now we have put our sheets together, shall we have the leaves cut in the American fashion, or, following the example of our English brethren, leave them with rough edges? We find in many instances that we have no choice; the issues are so irregular in size as to make trimming a necessity, and to leave with some, instead of the fair margin which we so delight in, scarcely any margin at all; and some of the best journals do this. Finally, we are to select our title-page and index to be properly inserted. Where are they?a question which is very often left unanswered. Why do so many journals publish these important parts of a year's volume in the next year's issue? It seems like taking a mean advantage to make a man continue his subscription; but even that is better than not publishing them at all, as is sometimes the case. That grand work, the Index Medicus, should be patronized for indexing so much otherwise totally unindexed matter, if for nothing else. What title shall we give our specimen journal in our catalogue and for its back? It commenced as the Weekly Medical Informer, perhaps; now, when half through its third volume, it has become the Smithville Weekly Medical Informer. All we can do is to make a new catalogue card, and put two titles on the back, one for each half the volume. The numbering of the volume will go on rolling up without regard to change of title, and we must follow as best we can. When we get into series, volumes, and numbers, with their irregularities, we have to take down our arithmetics and use our Yankee inheritance of guessing.

I would respectfully submit these remarks through your pages to the consideration of the Association of Medical Editors, in the hope that they may some day remedy these evils by requiring a certain standard of execution in publication for recognition by them.

LIBRARIAN.

THE NEW ANÆSTHETIC, HYDROBROMIC ETHER.

MR. EDITOR, — Dr. Laurence Turnbull, of Philadelphia, having had his attention directed to the anæsthetic properties of the bromide of ethyl, or hydrobromic ether, by the physiological experiments of Rabuteau upon the lower animals, has successfully employed it in the human subject as a substitute for

¹ Comptes Rendus, lxxxiii. 1294.

chloroform, and at the recent meeting of the Congrès International at Amsterdam he reported that it had been thus used up to that time in over one hundred cases, not only without a fatal result, but also without any unfavorable symptoms. It is a colorless fluid, possessing an agreeable odor and pleasant taste, and as regards density and volatility it is intermediate between chloroform and the ordinary so-called sulphuric ether. It is not decomposed in the system, and appears to be eliminated by the lungs. A few drachms of the ether upon a towel are generally sufficient to produce complete unconsciousness; it is rapid in establishing anæsthesia, and transitory in its effect; there is no subsequent depression, the pulse usually remaining below 100 per minute, and, as a rule, there is no vomiting.

Dr. Turnbull has employed it principally for minor operations, and finds it well adapted for office use on account of its transitory effects. Dr. Levis has lately used the bromide of ethyl as a substitute for ether at the Pennsylvania Hospital, and as these appear to have been the first instances in which severe operations were performed short notes of the cases are appended (kindly furnished by Dr. John B. Roberts).

It has up to the present time been used on four occasions in the Pennsylvania Hospital, namely, amputation of the fore-arm at the upper third, perineal section for stricture of the urethra, resection of a stump after former amputation of the arm, and in a case of fracture of both legs, where it was administered in order that a careful examination might be made and tenotomy be performed.

CASE I. A vigorous man was admitted with a railroad crush, requiring amputation of the fore-arm at the upper third. The operation and the subsequent arrest of profuse hæmorrhage, including the dressing, occupied forty minutes. During this time anesthesia was maintained by eleven fluid drachms of the bromide of ethyl. Snoring respiration was produced in three minutes by the first fluid drachm, and return of consciousness took place three minutes after the administration of the agent was stopped. The pulse before the operation was 80, but during anæsthesia gradually rose to 90, while the respiration was only slightly affected. There was a little nausea immediately after the operation, but this soon disappeared.

Case II. A large man, who had sustained fracture of both legs, was anæsthetized in order that a proper examination might be made and tenotomy of the tendo Achillis performed. One fluid drachm was inhaled, with the effect of producing snoring in one minute and a half; a second drachm was followed by complete muscular relaxation. The towel was withdrawn, and two minutes afterwards the man winked, showing that consciousness was returning. Complete anæsthesia was again induced by the administration of a third drachm. The tendo Achillis of the left foot was then cut subcutaneously in order to overcome displacement favored by the obliquity of the fracture. The patient altogether inhaled four drachms, and was under the anæsthetic influence ten minutes. There was no vomiting, the pupils were, it is said, uninfluenced, and respiration continued normal. The pulse gradually rose from 80 or 85 to 90 per minute. There was no struggling, as occurs so frequently during etherization. During the afternoon slight nausea was present, but there was no vomiting.

CASE III. Perineal section was performed in this instance for the relief of a perineal fistula resulting from traumatic stricture of the urethra. The pulse of the man before the administration of the anæsthetic counted 120, and the respirations 30. He was given one drachm, and in two minutes another drachm. In six minutes from the beginning stertorous respiration occurred, while in eight minutes the pupils were strongly contracted, and there was profuse sweating. At the end of ten minutes the pulse was 120, and the respirations were 36. Eleven minutes after the first inhalation, a third drachm was given, and at this time the notes state that the pupils were dilated widely, the pulse 90, and the respirations 28. The patient recovered consciousness two minutes after the administration was stopped.

Case IV. A young girl, who had suffered an amputation of her arm at the upper third while an infant, presented a deformed stump. The soft structures had retracted and left the bone protruding, covered only by skin, the surface being irritable. The patient was rapidly rendered unconscious by less than two drachms of the bromide of ethyl, and the bone retrenched by strong forceps after making small flaps. After the operation she rapidly recovered from the anæsthetic, and showed no depression of the circulation nor inteference

with respiration.

The results thus far obtained seem to prove that the new anæsthetic has strong claims for popular favor, but deserves closer study and more extended experience before it can be considered as established in the position which it now appears to occupy, that of being the most agreeable, efficient, and reliable of our anæsthetic agents for use in general surgery.

We are informed that this ether is now made by Messrs. Powers and Weightman. There is no difficulty in preparing it by Personne's process. (See National Dispensatory.)

W.

PHILADELPHIA, November, 1879.

LETTER FROM ST. LOUIS.

Mr. Editor, — The charter of St. Louis, adopted in 1876, calls for the appointment of a board of commissioners of public charities. This board has been appointed, and has been discharging its duties for some time; but as there seemed to be a question as to its authority in regard to some reforms which it wished to introduce, a special meeting was held November 17th, at which a communication from the mayor, defining its duties and powers, was received. The duties and powers are wholly supervisory, and are limited to penal and charitable institutions supported partly or entirely by the city, namely, the city hospital, female hospital, insane asylum, poor-house, house of refuge, workhouse, and jail. The commissioners are required to visit these institutions once a month; they may recommend to the municipal assembly whatever changes they think are necessary, and by their unanimous vote may remove any appointed officer or employee of the institutions which they supervise. These cost the city, exclusive of repairs, three hundred and fifty-three thousand dollars annually. The commissioners are some of our most respected and honored

citizens: Dr. J. B. Johnson, E. A. Filley, James McGrath, M. Friede, and August Krieckhause. They receive no compensation for their services.

The Tennessee Medical Association offered its thanks to the United States government for the organization of the National Board of Health. A little centralization of government is not always a bad thing.

The Illinois State Board of Health has instructed its secretary to investigate the manner of issuing diplomas by the St. Louis *Eclectic* Medical College, and if it does not comply with their requirements in regard to the length of its terms, to withhold certificates from its graduates. Its diplomas were not recognized by our health department more than a year since. It must not be confounded with the St. Louis Medical College.

SHORT COMMUNICATIONS.

A CASE OF BELLADONNA POISONING.

BY F. L. SMITH, M. D., STAFFORD SPRINGS, CONN.

I was called on the evening of August 14th, at seven o'clock, to attend Mrs. G., a French woman, in labor with her fifth child, and on my arrival found her having strong and regular pains, the os being dilated to the size of a dime; she reported having been "sick all day." The pains continued unabated, recurring at intervals of ten or twelve minutes, the os, however, not dilating, but seeming to become more and more rigid and unvielding. This condition remaining unchanged, about twelve o'clock I made an application of ung. ext. belladonna to the neck of the womb, hoping to relieve the rigidity. The woman got up from bed to a chair immediately after the inunction. In less than fifteen minutes she complained of dizziness, and following in quick succession came great thirst, with dryness and burning of the mouth and fauces, nausea and ineffectual attempts to vomit, spasmodic movements of the arms, such as throwing them about the bed and striking at imaginary objects; there would be short intervals of repose, then these sudden convulsive motions; the pulse became feeble, the extremities cold, and the pupils widely dilated. Before the extreme urgency of the symptoms appeared, she had used a copious warm vaginal douche, with no apparent benefit, and as the case became seriously alarming I injected a third of a grain of sulphate of morphia under the skin of the arm. The convulsive motions soon subsided, and in three quarters of an hour had entirely disappeared; the thirst and dryness of the throat remained for ten or twelve hours. The labor pains did not subside until the introduction of the morphine, and the os remained unchanged throughout. I left the patient at six o'clock in the morning in a comfortable condition. There was no more appearance of labor for ten days, when the pains suddenly came on, and the woman was delivered of a healthy male child after three hours' labor. There seems a peculiar individual susceptibility to the action of the drug, as I had used precisely the same preparation, and in no larger quantity, with the best results, only a few days previous to this case, and in no case have I ever seen any deleterious effects follow its application. The drug must have been very rapidly taken into the circulation from the promptness of the symptoms after the application. I have not the slightest doubt the case would have proved fatal had nothing been done to prevent. The feetus was unaffected by the drug. A peculiar result following it in a day or two was the entire disappearance of a condition of most distressing and obstinate granular lids of fifteen months' standing, for which she had been treated at the Charitable Eye and Ear Infirmary in Boston. The ointment used was that recommended in the United States Dispensatory.

THE LYNN HEALTH BOARD.

Our valued correspondent, Dr. J. G. Pinkham, of Lynn, informs us that the result of the vote on the health act, to which we called attention in our last number, was as follows: Yes, 3,018; No, 204. So Lynn is to have a board of health.

REPORTED MORTALITY FOR THE WEEK ENDING DECEMBER 6, 1879.

| | Popula- | | | Percentage of total Deaths from | | | | | | | | |
|----------------------|--|--------------------------------|-----------------------------|------------------------------------|-------------------|--------------------------|-------------------|---------|--|--|--|--|
| Cities. | ropula- tion estimated for July, 1879. | Reported Deaths in each. | Deaths under Five Years. | The Principal "Zymotic". Diseases. | Lung Diseases. | Diphtheria and Croup. | Scarlet Fever. | Typhoid | | | | |
| New York | 1,085,000 | 493 | 205 | 15.65 | 22.76 | 7.11 | 1.22 | .8 | | | | |
| hiladelphia | 901.380 | 265 | 88 | 13.97 | 2.64 | 8.30 | 2.26 | 2.6 | | | | |
| rooklyn | 564,400 | 195 | 75 | 16.92 | 21.54 | 12.31 | .52 | 2.0 | | | | |
| hicago | 002,200 | 189 | 85 | 32.80 | 13.23 | 20.63 | 5.82 | 2.6 | | | | |
| t. Louis. | _ | 127 | 50 | 14.17 | 9.45 | 5.51 | .79 | 2.04 | | | | |
| Baltimore | 393,796 | 146 | 55 | 24.66 | 8.22 | 11.64 | 6.85 | 2.0 | | | | |
| Boston | 360,000 | 182 | 42 | 21.97 | 12.88 | 11.36 | .76 | 2.2 | | | | |
| incinnati | 280,000 | 102 | 12 | 21.01 | 12.00 | 11.00 | .10 | 2.2 | | | | |
| New Orleans | 210,000 | 100 | 35 | 14.00 | 12.00 | 4.00 | _ | _ | | | | |
| District of Columbia | 170,000 | 100 | 23 | 14.00 | 12.00 | 4.00 | _ | - | | | | |
| leveland | 160,000 | 60 | 20 | 85.00 | 5.00 | 18.33 | 11.67 | _ | | | | |
| ittsburgh | 100,000 | 63 | 32 | 38.33 | 15.87 | 14.29 | 1.59 | 4.7 | | | | |
| Iilwaukee | 127,000 | 47 | 19 | 31.91 | 8.51 | 25.53 | 1.00 | 4.2 | | | | |
| rovidence | 101.500 | 39 | 16 | 64.10 | 7.69 | 5.13 | 56.41 | | | | | |
| ew Haven | 60,000 | 10 | 3 | 60.00 | 10.00 | 10.00 | | - | | | | |
| harleston | 57,000 | 26 | l ii l | 90.00 | 23.08 | 10.00 | = | _ | | | | |
| Nashville | 27,000 | ii | | 18.18 | 9.09 | _ | = | 9.0 | | | | |
| owell | 53,300 | 15 | 5 5 8 9 | 26.67 | 20.00 | 20.00 | _ | | | | | |
| | 52,500 | 14 | 0 | 14.29 | 7.14 | 20.00 | = | - | | | | |
| Vorcester | | 9 | 0 | 11.11 | 1.14 | 11.11 | _ | - | | | | |
| ambridge | 50,000 48,500 | 24 | | 33.33 | 11.11 | 11.11 | | - | | | | |
| all River | | 17 | | | 4.16 | _ | 29.17 | | | | | |
| AWTence | 38,200 | 3 | 4 | 5.88 | 11.76 | 07.70 | - | - | | | | |
| ynn | 34,000 | 5 | 4 | 37.50 | - | 37.50 | - | | | | | |
| pringfield | 81,500 | ıĭ | - | 40.00 | - | 20.00 | - | 20.0 | | | | |
| New Bedford | 27,000 | 9 | 5 | 9.09 | | 9.09 | | - | | | | |
| alem | 26,400 | | 2 2 3 | 22.22 | 11.11 | 11.11 | 11.11 | - | | | | |
| Somerville | 23,350 | 5 7 | 2 | 20.00 | 28.57 | **** | 20.00 | - | | | | |
| helsea | 20,800 | | 8 | 28.57 | | 14.29 | - | - | | | | |
| Caunton | 20,200 | 11 | 2 2 | | 40.00 | 0.00 | - | | | | | |
| Iolyoke | 18,200 | 11 2 | 2 | 27.27 | 27.27 | 9.09 | | 18.1 | | | | |
| loucester | 17,100 | 2 | | 50.00 | | - | 50.00 | - | | | | |
| Newton | 17,100 | _ | - | - | - | - | - | - | | | | |
| Iaverhill | 15,300 | 18 | 1 | | | - | - | | | | | |
| Newburyport | 13,500 | | | 10.00 | *0.00 | - | - | 10.0 | | | | |
| Pittsfield | 12,650 | 2 | - | 00 | 50.00 | - | | - | | | | |
| Pitchburg | 12,500 | 4 | - | 50.00 | 25.00 | - | - | - | | | | |
| Milford | 9,800 | 4 | 0 | 25.00 | 25.00 | | - | 25.0 | | | | |

Two thousand and sixty-four deaths were reported: principal "zymotic" diseases (small-pox, measles, diphtheria and croup, diarrhoal diseases, whooping-cough, erysipelas, and fevers) 431, lung diseases 286, consumption 285, diphtheria and croup 210, scarlet fever 76, diarrhoal diseases 38, typhoid fever 33, whooping-cough 27, malarial fevers 17, measles 16, cerebro-spinal meningitis six, erysipelas six, small-pox two. (In addition, District of Columbia reports 15 deaths from lung diseases, consumption 14, diphtheria and croup four, scarlet fever and malarial fevers three, small-pox, erysipelas, and diarrhoal diseases one each, — total deaths not given.) In the cities excluding the District of Columbia, from whooping-cough, Pittsburgh five, Baltimore and Boston four, New York three, New Haven and Worcester two, Philadelphia, St. Louis, Cleveland, Milwaukee, Lowell, Chelsea, and Fitchburg one; from malarial fevers, Brooklyn five, New York and New Orleans four, Baltimore two, Cleveland and Nashville one; from measles, New York 10, Chicago three, St. Louis two, New Haven one; from erysipelas, New York three, Pitts-

burgh, Providence, and Fall River one; from small-pox, Philadelphia and New Haven one each.

As compared with the previous week, there is an increased mortality from small-pox, measles, whooping-cough, and typhoid fever; decreased from scarlet fever, diphtheria, malarial fevers, diarrhead diseases, and consumption. In the 19 cities and towns of Massachusetts, whooping-cough and typhoid fever showed greater mortality than for the preceding week; lung diseases and diphtheria less.

The meteorological record for the week in Boston was as follows :-

| Date. | Barom- eter. | Thermom- eter. | | | Relative Humidity. | | | | Direction of Wind. | | | | Velocity of Wind. | | | tate | | Rainfall. | |
|---|--|--|--|--|---|--|---|--|--------------------|-------------------------------------|--------------------------------|----------|----------------------|-------------------|-------------|----------------------------|---------------|-----------|----------------------|
| | Mean. | Mean. | Maximum. | Minimum. | 7 A. M. | 2 P. M. | 9 P. M. | Mean. | 7 A. M. | 2 P. M. | 9 P. K. | 17 A. M. | 2 P. M. | à | 7 A. M. | 2 P. M. | 9 P. M. | Duration. | Amount in Inches. |
| Nov. 30 Dec. 1 " 2 " 3 " 4 " 5 | 30.379 30.265 30.148 30.154 30.254 30.477 30.090 | 24 36 45 44 43 36 42 | 30 48 55 54 55 42 49 | 20 16 34 42 36 29 36 | 58 69 53 67 100 78 81 | 32 21 32 70 54 42 91 | 47 57 69 83 74 71 100 | 46 49 51 78 76 64 91 | W Calm W W W N SE | NW SW SW E NW E E | W SW SW NW NW E | 9588 | 8 6 16 8 | 16 7 4 8 | O F F R F O | C F F F O R | C C O C C O R | | .09 |
| Week. 30.252 39 46 | | 31 | 64 | | | В | | | miles. | | | Fair. | | | 17 hrs. | .89 | | | |

¹ O., cloudy; C., clear; F., fair; G., fog; H., hazy; S., snow; R., rain; T., threatening.

For the week ending November 15th, in 149 German cities and towns, with an estimated population of 7,560,614, the death-rate was 22.6 against 22.8 of the previous week. Three thousand two hundred and ninety-two deaths were reported: consumption 455, diarrhoeal diseases 183, diphtheria and croup 145, scarlet fever 77, typhoid fever 62, measles 62, whooping-cough 44, puerperal fever 16, small-pox one, typhus fever one. The death-rates ranged from 15.8 in Elberfeld to 43.9 in Duisburg; Dantzic 35.4; Munich 32.1; Dresden 20.8; Berlin 21.2; Leipsic 27.1; Hamburg 23.5; Hanover 19.0; Bremen 19.1; Cologne 21.2; Frankfort 16.9. Also for the same week Vienna 23.7; Paris 24.4.

For the week ending November 22d, in the 20 English cities, with a population estimated at 7,383,999, the death-rate was 24.7 against 22.8 of the previous week. Three thousand four hundred and eighty-eight deaths were reported: diseases of the respiratory organs 499, scarlet fever 190, measles 133, diarrhea 68, whooping-cough 68, fever 60, diphtheria 24, small-pox (London) one. The death-rates ranged from 15.4 in Portsmouth to 30.7 in Liverpool. London 25.4; Birmingham 24.7; Manchester 26.5; Leeds 25.4. In the 20 prominent Swiss towns there was shown an improvement in the public health, "zymotic" diseases being less fatal. The death-rate in Geneva was 15.7; Zurich 11.5; Basel 17.6.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF OFFI-CERS OF THE MEDICAL DEPARTMENT U. S. ARMY, FROM DECEM-BER 6, 1879, TO DECEMBER 12, 1879.

Kimball, J. P., captain and assistant surgeon. When relieved from duty at White River, Colorado, to proceed to Fort Sanders, Wyoming Territory, and resume his duties as post surgeon. S. O. 111, Department of the Platte, December 6, 1879.

DEWITT, C., captain and assistant surgeon. To resume his duties as post surgeon, Fort Sidney, Nebraska. S. O. 111, C. S., Department of the Platte.

APPEL, D. M., first lieutenant and assistant surgeon. Granted leave of absence for one month, with permission to apply for one month's extension. S. O. 241, Department of the Missouri, December 2, 1879.

THE METRIC SYSTEM IN MEDICINE.

| OLD STYLE. | | | | | | Gr | |
|----------------------|--|--|--|--|--|----|----|
| mi. or gr. i. equals | | | | | | | 06 |
| f3i. or 3i. equals | | | | | | 4 | |
| f3i. or 3i. equals | | | | | | 32 | |

The decimal line instead of points makes errors impossible.

As .06 (Drug) is less than a grain, while 4. and 32. (Vehicle) are more than the drachm and ounce, there is no danger of giving too large doses of strong drugs.

C. C. used for Gms. causes an error of 5 per cent. [excess].

A teaspoon is 5 Gms.; a tablespoon, 20 Gms.

Rush Medical College, Chicago. — A concours for the lectureship on gynæcology in the spring course of lectures in this college will be held January 6, 1880. Applications for admission thereto received from "regular" physicians only. All who desire to compete for the position are requested to communicate with the secretary, who will assign subjects and furnish any desired information relating to the conditions of the concours. At the last spring session of lectures in this college 148 students were enrolled. Already 113 have matriculated for attendance upon the lectures next spring.

J. H. ETHERIDGE, Secretary.

BOOKS AND PAMPHLETS RECEIVED. — Observations in One Hundred Cases of Carcinoma. By Dr. T. E. Satterthwaite, Surgeon to the Demilt Dispensary, etc., and Dr. W. H. Porter, Curator to the Presbyterian Hospital. (Reprint.) New York: D. Appleton & Co. 1879.

Analysis of the Record of Yellow Fever in New Orleans during the Year 1879. (Reprint.)

Ninety-Seventh Annual Catalogue of the Medical School of Harvard University, 1879-80. Cambridge: Charles W. Sever. 1879.

A Dictionary of the German Terms used in Medicine. By George R. Cutter, M. D., Surgeon of the New York Eye and Ear Infirmary, etc. New York: G. P. Putnam's Sons. 1879. (A. Williams & Co.)

A Biographical Dictionary of Contemporary American Physicians and Surgeons. Edited by William B. Atkinson, M. D. Second Edition, enlarged and revised. Philadelphia: D. G. Brinton. 1880.

Psycho-Physiological Training of an Idiotic Hand. By Edward Seguin, M. D. (Reprint.) New York: G. P. Putnam's Sons. 1879.

Eighth Annual Announcement of the College of Medicine, Syracuse University. 1879-

Early Medical Chicago. An Historical Sketch of the First Practitioners of Medicine, with the Present Faculties and Graduates since their Organization of the Medical Colleges of Chicago. By James Nevins Hyde, A. M., M. D., late Passed Assistant Surgeon U. S. Navy, Professor of Dermatology, Rush Medical College. Chicago: Fergus Printing Company. 1879.

Regulations for the Government of the United States Marine Hospital Service. Washington, 1879.

Annual Report of the Surgeon-General, United States Army. 1879.

Transactions of the Medical Society of the State of Pennsylvania. Philadelphia. 1879.
Annual Address before the American Academy of Medicine at New York, September 16, 1879. By Lewis H. Steiner, A. M., M. D., President of the Academy, etc. New York. 1879.

Paracentesis of the Pericardium. A Consideration of the Surgical Treatment of Pericardial Effusions. By John B. Roberts, A. M., M. D., Lecturer on Anatomy in the Philadelphia School of Anatomy, etc. With Illustrations. Philadelphia: J. B. Lippincott & Co. London: 16 Southampton Street, Covent Garden. 1880. (A. Williams & Co.)

The Physician's Daily Pocket Record. By S. W. Butler, M. D. Fourteenth Year. A very convenient little book. Edited by D. G. Brinton, M. D. Philadelphia. 1880.